UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802- 4213

JUL 14 2006

In response, refer to:
151401SWR2004PR13870:MLD

Mark A. Prescott
Chief, Deepwater Ports Standards Division
U.S. Coast Guard
2100 Second Street, S.W.
Washington, D.C. 20593-0001

Dear Chief Prescott:

NOAA's National Marine Fisheries Service (NMFS) has reviewed your letter dated June 5, 2006, and received in our office June 12, 2006, requesting concurrence with the U.S. Coast Guard's (USCG) determination under Section 7 of the Endangered Species Act (16 U.S.C. § 1536(a)(2)) on the effects of the construction and operation of the proposed Cabrillo Port Deepwater Port on listed species. The proposed port would be located approximately 14 miles off Ventura County, on the shoreward side of the Southern California Bight. The applicant, BHP Billiton, has proposed a floating, storage, and regasification unit (FSRU) for transforming liquefied natural gas (LNG) back to its gaseous state. The USCG has requested that NMFS concur with its determination that construction and operation will not affect white abalone (*Haliotis sorenseni*) or any other abalone species of concern and may affect, but is not likely to adversely affect, the following species: steelhead (*Oncorhynchus mykiss*), bocaccio (*Sebastes paucispinus*), Pacific rockfish (*Sebastes spp.*), sei whale (*Balaenoptera borealis*), blue whale (*B. musculus*), humpback whale (*Megaptera novaeangliae*), fin whale (*B. physalus*), North Pacific right whale (*Eubalaena glacialis*), sperm whale (*Physeter macrocephalus*), Steller sea lion (*Eumetopias jubatus*), Guadalupe fur seal (*Arctocephalus townsendi*), and the Southern sea otter (*Enhydra lutris*). The Southern sea otter is under the jurisdiction of the U.S. Fish and Wildlife Service, and therefore, we recommend that you contact Eric Morrissette of the FWS at 805-644-1766 ext. 223 regarding consultation on this species. Bocaccio and the cowcod (*Sebastes levis*), the only other rockfish that is listed as a species of concern (69 FR 19975), are not a candidate species, as indicated in your letter. We do not include species of concern in our Section 7 consultations; therefore, no concurrence for bocaccio, cowcod, or abalone species other than white abalone is necessary.

Endangered Species Act (ESA) Comments

NMFS has previously commented on this project in October 2003 and June 2004 (Enclosures 1 and 2). A letter, dated October 7, 2003, provided a review of the Cabrillo Port Deepwater Port Application and listed specific recommendations and comments critical to determining the environmental impacts of the project. The June 22, 2004 letter provided a species list;

however, the information provided in that letter is outdated. Therefore we are providing an updated species list, as of June 2006, for those ESA-listed species that are likely to be found in the project area (Enclosure 3).

The USCG, in collaboration with the California State Lands Commission, prepared a Revised Draft Environmental Impact Report (EIR), dated March 2006. In general, based on information contained in the Draft EIR and your June 5, 2006 letter, NMFS is unable to adequately evaluate the scope of project-related impacts because much of the information provided regarding biological resources is limited to the immediate project area near Santa Barbara, even though the action area is much larger than immediate area surrounding the proposed FSRU (see specific comments below, regarding vessel traffic and noise impacts). The action area means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (*e.g.*, shipping routes (from the U.S. Exclusive Economic Zone to the LNG facility), sound pressure levels associated with construction and operation (from the sound source to specific distances throughout the entire project area where noise levels may impact marine resources), etc.).

The term "effects of the action" as defined in regulations (50 CFR 402.02) is the guide used to evaluate the impacts of the proposed action. Direct and indirect effects of the proposed action and interrelated and interdependent actions should be evaluated in the context of the environmental baseline for the action area to assist NMFS in our assessment of potential project impacts. Indirect effects are defined as those effects that are caused by or will result from the proposed action and are later in time, but reasonably certain to occur. Interrelated actions are defined as part of the proposed action and depend on the proposed action for justification. Interdependent actions are defined as those actions which have no independent utility apart from the action under consultation[1].

In October 2003, NMFS asked that the applicant revise the cumulative effects analysis so that it included not only LNG related impacts, but also other actions impacting resources that are potentially affected by the proposed project over its 40 year life span. To date, NMFS has not received this information. For your convenience, enclosed are copies of the October 7, 2003 (Enclosure 1), and June 22, 2004 (Enclosure 2), letters from NMFS to the USCG regarding the Cabrillo Port Deepwater project, including specific comments requesting detailed information on the project.

A. Fish

The June 5, 2006, letter failed to make a determination with regard to the effects of the proposed action on several ESA-listed fish species, under NMFS' jurisdiction, that may be found in the action area. Since NMFS was not provided with a description of proposed vessel routes, we are providing a list of all ESA-listed fish species off the west coast (Enclosure 3).

[1] Definitions taken from the Code of Federal Regulations 402.02.

B. Invertebrates

The June 5, 2006 letter states that the effects of the proposed action will have no effect on the endangered white abalone, nor will it have effects on other abalone species of concern. However, evidence to support this statement was not provided despite NMFS' October 2003 (Enclosure 1) request that the applicant provide detailed information on the total affected area, specifically the amount of rocky substrate that will be affected by the project. NMFS recommended that high resolution bathymetry maps of the action area be provided so that an accurate assessment of the project's impact on marine benthic species could be made. To date, NMFS has not received this information.

Finally, your June 5, 2006 letter states that no species of abalone have been reported at or near the project area. Evidence to support this statement was not provided. NMFS has evidence to suggest that the endangered white abalone and other abalone species of concern could be in the likely action area. California Department of Fish and Game landings data indicate that 0.29 percent of the total white abalone landings between 1955-1993 came from locations between Pt. Conception and Pt. Dume (Hobday *et al.* 2001[2]). In addition, at least two white abalone have been identified in shallow water (approximately 5-10 m) off of the Santa Barbara County coast, not far from the likely action area, since 2001. Given these issues, NMFS can not concur that the project will have no effect on the endangered white abalone.

C. Sea Turtles

The June 5, 2006, letter failed to make a determination with regard to the effects of the proposed action on several species of sea turtles, which are listed under the ESA, under NMFS' jurisdiction, and may be found in the action area. Sea turtle species that may be found in the action area include: green turtle (*Chelonia mydas*), leatherback (*Demochelys coriacea*), loggerhead (*Caretta caretta*), and olive ridley (*Lepidochelys olivacea)*.

D. Marine Mammals

Based on the information contained in the Draft EIR and your letter, NMFS cannot concur with the determinations made for marine mammals because the information provided to support the conclusions are either incorrect or insufficient (see specific comments below). For example, your letter states that blue, fin, and humpback whales are very unlikely to be in the project area; however, several studies have shown that these species are known to occur throughout much of the likely action area. Also, please note that all marine mammals are protected under the Marine Mammal Protection Act of 1972. However, we are unable to determine whether a permit under the MMPA is necessary for this project at this time, due to insufficient information provided in the Draft EIR. Thus, the following specific comments included in this letter are applicable to all marine mammals, both ESA-listed and non-ESA-listed.

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[2] Hobday, A.J., M.J. Tegner, and P.L. Haaker. 2001. Over-exploitation of a broadcast spawning marine invertebrate: Decline of the white abalone. Reviews in Fish Biology and Fisheries 10: 493-514.

E. Specific Comments

Vessel Traffic: Support, transport and regasification vessels have the potential to affect listed species due to increases in the number of vessels and trips (*i.e.,* when compared to the baseline), differences in vessel traffic patterns, and types of habitat that may be impacted by such vessels. Specifically, vessel traffic has the potential to affect listed species (*e.g.* ESA-listed marine mammals and sea turtles) and non-ESA listed marine mammals found in nearshore and offshore waters. Adverse reactions by whales to vessel activity have been recorded, and all are vulnerable to collisions with vessels (Laist *et al.* 2001[3]). The potential LNG vessel routes and species that may be affected should be included in a vessel strike analysis. The Draft EIR (March 2006) indicates that vessels would travel across the Pacific Ocean, and either the West Tanner Bank or Outer Santa Barbara Passage routes may be used as approach routes. The analysis of impacts only refers to the proposed location for the FSRU and associated pipeline and does not include an analysis of the entire route. Jensen and Silber (2003[4]) reported known information on ship strikes to large whales world-wide, and the NMFS Regional Offices also maintain records of reported ship strikes to marine mammals and sea turtles.

Noise: The noise measurements given in the Draft EIR indicate that peak pressure levels generated from vessels used in proposed construction activities range from 151 to 181 dB, and Table 4.7-11 indicates that at 10km distance, noise generated from offshore equipment could reach 178 dB. However, dynamic-positioning pipelaying vessels may be heard underwater at a distance of 24km from a construction site (Woodhouse and Howorth 1992[5]). NMFS is currently in the process of determining safety criteria (*i.e.,* guidelines) for marine species exposed to underwater sound. However, pending adoption of these guidelines we have preliminarily determined, based on past projects, consultations with experts, and published studies, that 180 dB re $1\mu Pa_{RMS}$ (190 dB re $1\mu Pa_{RMS}$ for pinnipeds) is the impulse sound pressure level that can be received by marine mammals without injury. Marine mammals have shown behavioral changes when exposed to impulse sound pressure levels of 160 dB re $1\mu Pa_{RMS}$. The Draft EIR does not indicate what the zones of noise influence would be for underwater and airborne sound sources associated with construction and operations of the FSRU facility. Sounds introduced into the sea by man-made devices could have a deleterious effect on marine mammals by causing stress or injury, interfering with communication and predator/prey detection, and changing behavior. Acoustic exposure to loud sounds may result in a temporary or permanent loss of hearing (termed a temporary (TTS) or permanent (PTS) threshold shift) depending upon the location of the marine mammal in relation to the source of the sound. Typically, any protective measures used to minimize impacts to marine mammals are also advantageous to sea turtles.

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[3] Laist, D.W., A.R. Knowlton, J.G. Mead, A.D. Collet, and M. Podesta. 2001. Collisions between ships and whales. Marine Mammal Science, 17:35-75.

[4] Jensen, A. and G. Silber. 2003. Large Whale Ship Strike Database. U.S. Department of Commerce, NOAA Technical Memorandum. NMFS-OPR, 37 pp.

[5] Woodhouse, C. and P. Howorth. 1992. Exxon SYU project, marine mammal monitoring program: Final Report. Prepared for Exxon.

Decommissioning: The Cabrillo terminal is expected to be decommissioned after its anticipated 40-year life. According to the Draft EIR, underwater sounds produced during decommissioning may have the potential to disturb marine mammals and sea turtles. The Draft EIR (Volume I; March 2006) states that decommissioning would entail removing the FSRU from the mooring point and towing it to a shipyard, closing the subsea valves, disconnecting the risers and mooring legs, removing or leaving the ocean floor anchors, and possibly abandoning or leaving the offshore pipelines. Although the exact methods of decommissioning are not described, NMFS is concerned with the potential use of explosives to sever terminal structures and the potential methods to remove debris from the seafloor. The use of explosives has the potential to adversely affect all animals within the zone of influence, including listed sea turtles and marine mammals (both listed and non-listed). NMFS recommends avoiding the use of explosives during decommissioning.

Mitigation Plan: Although Volume I, Section 4.7 of the Draft EIR describes some of the impacts that may occur as a result of the project and that monitoring plans will be prepared, details on proposed measures to minimize or avoid harm to protected species and proposed mitigation plans were not provided to NMFS. For example, AM BioMar-9b, in the Draft EIR, describes certain minimization measures (*i.e.,* avoidance of the gray whale migration during construction operations) and monitoring responsibilities, indicating that monitors would be familiar with mitigation measures described in the Marine Mammal Monitoring Protocol. NMFS cannot concur with the USCG's findings without having the opportunity to review proposed mitigation and monitoring protocols.

These comments are provided in accordance with the ESA. We appreciate your efforts to comply with Federal regulations and to conserve protected species. As described in this letter, additional information is required before NMFS can proceed with the consultation for this project. Please contact Monica DeAngelis at 562-980-3232 or Monica.DeAngelis@noaa.gov, if you have any questions concerning this letter or if you require additional information.

Sincerely,

Anthony G Morton

for Rodney McInnis
Regional Administrator

Enclosures
1. October 2003 NMFS Letter
2. June 2004 NMFS Letter
3. ESA species list

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

OCT - 7 2003

F/SWR3:MLD

Commandant (G-MSO-2)
United States Coast Guard
2100 Second St. SW
Washington, DC 20593

Dear Commandant:

The National Marine Fisheries Service (NOAA Fisheries) Protected Resources Division has reviewed the Cabrillo Port liquified natural gas (LNG) Deepwater Port Application and found it to be of high quality. However, we have identified some deficiencies that we recommend be corrected prior to the application being deemed complete. The comments provided herein are based on the information provided in the Environmental Analysis and supporting documentation, dated August 2003, and our knowledge of the intertidal and marine habitats and species likely to be found in the vicinity of the proposed location for the Cabrillo Port project. Bryant Chesney, of our Habitat Conservation Division, has provided comments to you, relative to Essential Fish Habitat, via electronic mail, dated September 15, 2003.

We appreciate the opportunity to comment on the LNG Deepwater Port Application. We offer specific recommendations and comments in the Attachment that are critical to determining the environmental impacts of the project as well as more specific comments needed to substantiate environmental findings.

In general, we identified the following deficiencies:

1. Information on the total affected project area, specifically the amount of rocky substrate that will be affected should be included in order for an accurate assessment of impact on marine benthic species. We recommend conducting side-scan or multi-beam sonar surveys of the project area to obtain high resolution bathymetry maps of the area.

2. The analysis of cumulative effects of the project and all other activities on resources impacted over the 40 year life span of the project needs revision. Cumulative analysis needs to address not only LNG related impacts, but also other actions impacting resources that are potentially affected by the proposed project.

3. The impacts of decommissioning the floating storage and regasification unit (FSRU), mooring and pipelines, needs to be addressed in greater detail.

4. Geographic distances throughout the document are inconsistent and should be corrected.

5. A detailed analysis of impacts to the marine environment from LNG spills and noise (both airborne and underwater) from construction and operation should be included.

Thank you for consulting with NOAA Fisheries and your consideration of our recommendations. Should you have any questions, please contact Monica DeAngelis at (562) 980-3232 or Monica.DeAngelis@noaa.gov.

Sincerely,

for Rodney R. McInnis
Acting Regional Administrator

COMMENTS PORT CABRILLO LNG DEEPWATER PORT

Page	Section	Paragraph	Sentence	Comment
		Executive Summary		
3	Project Description	2		What is the total area of sea floor that will be affected by this project?
4		6		Alternatives discussion: See comment under "Alternatives" below.
6	Environmental Setting	6		The endangered white abalone could also be in the project area. CDFG landings data indicate that 0.29 percent of the total white abalone landings between 1955-1993 came from locations between Pt. Conception and Pt. Dume. In addition, a white abalone was found in 30 ft. of water off Point Conception in 2001. Green and pink abalone will be added to the NOAA "Species of Concern" list in 2004 and black abalone are already on this list. Given this, NOAA Fisheries would have to know if, how much and where rocky habitat exists within the project area. This information is crucial for making an accurate assessment of potential impact.
				Three species of Federally endangered baleen whales, the blue, fin, and humpback whale, may also occur in the project area (update information on page 5-43).
	Table ES-1			NOAA Fisheries/ NMFS is part of the Department of Commerce not the Department of the Interior.
				NOAA Fisheries would be primary approval agency for the marine mammals in the project area. Please correct Agency Action to "Confer on protected marine mammal species."
	Table ES-2			Include a discussion on potential impacts to marine mammals from LNG spills, fuel or lubricating oil spills, and noise. These are included in Section 5.2-4, but not here.
		3.0 Project Description		
3-21-3-30	3.5	General - Construction		It is not clear in the descriptions provided, how the pipeline will be placed on the sea floor or how the pipe segments will be joined. It is also not clear how large the drilled area will be. If there are potential impacts to environmental resources, include in analysis of impacts.
3-27				It is not clear how often Hydrostatic Testing will occur and if any impacts to environmental resources are expected. It is also not clear if the hydrostatic test method will be used to test the pipeline for leaks throughout the project's life span and how often the pipeline will be tested. If there are potential impacts to environmental resources, include in analysis of impacts.
3-37		Decommissioning		The impacts of decommisioning the FSRU should be assessed for all resources. Including impacts from removing the facility, anchors, and pipeline. Also including disposal of pipeline, method of removal. Impacts for leaving anything in place should also be included.
	Fig. 3.5-2			Geographic distance here and throughout document. The document states that Anacapa Island is 21 miles from the FSRU. Next the document states that the Channel Island National Marine Sanctuary is 18 miles from the FSRU. The outer boundary of the Sanctuary is 6 miles off Anacapa, so the FSRU must be less than 18 miles away and in addition, figure 3.5-2, depicts the outer boundary of the Sanctuary (in blue) to be closer (i.e. approximately 12 miles based on the scale on the map) than the 18 miles reported in the text.

	4.0 Alternatives			
	4.0			This section provides information on changes in the proposed project's components, and those that were eliminated in favor of the proposed project. Thus, no true alternative was suggested. An example of an alternative would be to consider moving the FSRU mooring facility to a location farther from the shipping lane.
	5.0 Environmental Review			
5-30	5.2.1	3		What is the total affected area for this project? If the project area is large enough, 3% may include a large portion of potential abalone habitat in the area.
5-31	5.2.1	4		What types of biological surveys will be conducted to identify "all benthic features and habitat..."
5-33	5.2.1	Rocky Shores		Is there a historic record of black abalone within or near the project area?
5-33	5.2.1	Subtidal Benthic Comm.		Area of hard substrate is necessary to assess potential impacts on abalone.
5-43	5.0	Marine Mammals	2 or 3	Add: Northern elephant seals are also likely to be found in the project area. Add: Blue, fin, and humpback whales could also be found in the project area in low numbers.
5-44		3		Add: Northern right whale dolphins could also occur in the project area.
5-44		5 & 6		Loggerheads may be found anytime of the year off southern California, but they are most likely to be found during years with unusually warm sea surface temperatures, such as during El Nino. Leatherbacks are more likely to be found in the area, during late summer and early fall. Green and olive ridley sea turtles are less likely to be found in the area. Loggerheads should not be the sole focus.
5-45	5.2.2			No description of NEPA is provided here.
5-55	5.2.4	Construction of Subtidal...		Surveys (SCUBA, ROV, Sonar ?) of the pipeline affected area would help in determining the kinds of benthic species that would be impacted and to what degree.
5-58	5.2.4	Noise Levels	1 and 2	Noise levels are cited as dbA, which refers to A-weighted levels applied to airborne sounds in accordance with human hearing sensitivity. Noise decibel levels should be cited as dB.
			2	Clarify if noise levels refer to airborne or underwater sounds and if "project noise levels" refer to only construction noise and/or operating noise.
5-59		3		While there is specific discussion involving oil spill impacts to gray whales, there is no discussion regarding expected levels of impacts from oil spills associated with the project on other marine mammals, particularly, the pinnipeds. They not only could swim in the oil spill area, but also have the potential to be impacted via oil reaching shorelines i.e. haul-out sites or pupping grounds.
5-60			2	Provide information on documented ship strikes on marine mammals and sea turtles in this section.
5-60		1		Description of adverse effects of oil should be applied to all sea turtles, not just loggerheads.
	5.2.5	Mar-a		It is not clear if monitoring will also be included during the pipe-line laying and other phases of construction. Also, information should be provided on the number of observers to be stationed on the lay vessel, the hours of monitoring (particularly if work is to be conducted on a 24-hour basis), the establishment of a safety zone, and what the protocol will be if a marine mammal enters the safety zone. Training should include sea turtle ID.
5-61		Mar--16		Gray whale females and their calves may be present in the project area in April-May, during their northerly migration. Although uncommon, it has been documented that some gray whales give birth during the December-February southerly migration and could be in the project area, as well.
5-79	Table 5.2-7			Northern elephant seal: replace "Not Likely" with "Yes."

5-80	Table 5.2-8			Blue whale: replace "No" with "Possible."
				Fin whale: replace "No" with "Possible." Humpback whale: replace "No" with "Possible." Northern right whale dolphin: replace "No" with "Possible." Short-finned pilot whale: replace "Yes" with "Not likely." Killer whale: replace "No" with Possible." Baird's beaked whale: replace "No" with "Not likely."
5-82	Table 5.2-9			Only the Mexican breeding populations of East Pacific greens and Olive Ridley sea turtles are Endangered, otherwise, they are both Threatened. Thus, Status should be "T/E"
5-211		2		Possible pipeline leak: provide information about impacts to the marine environment, including but not limited to, marine mammals, turtles, fish, benthic organisms, etc. Also describe what occurs to the LNG (float to surface, dissipate, etc.) if released into the water column at the depth where the pipeline is located.
5-278		3		Document states a 45-day pipeline construction period with a total of 145 trips added and a 45-day FSRU mooring construction period adding a total of 135 trips to marine traffic. Please clarify if these are two separate events or combined during the same 45-day time frame. It is also not clear what time of year the proposed project construction will take place.
5-279		5	1	Document states that the project operations will generate a total of 11 trips weekly or approximately 556 trips per year to transport LNG, crew, and supplies. Earlier in the document (Section 3.0), it was stated that the LNG carrier is expected 3 times a week for 15-20 hours to unload. Assuming the additional 8 trips a week are for crew and supplies, please describe these procedures and provide an analysis of potential impacts on environmental resources.
5-284	Noise transmission in water			The unit for "pascals" should be changed from PA to Pa.
		5	5	"To compare noise levels in water to noise levels in air, one must subtract 26 dB from the noise level referenced in water." No reference is provided.
5-285		4		"The impacts to the Project to marine mammals and proposed mitigation are discussed further in the section on Marine Biology." The section on Marine Biology does not distinguish between airborne and underwater noises. Nor is any minimization and/or mitigation proposed for impacts due to noise on marine mammals or other marine biota using in-water levels.
	Table 5.9-1	Equipment Noise		Please indicate whether the equipment is primarily for the construction and/or operation.
5-378	5.17			The document should analyze the cumulative effects and all other activities on environmental resources potentially impacted by the project over the 40 year life span.
	Appendices			
No Page		Short-finned pilot whale -1		Short-finned pilot whales are not likely to occur in the project area.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802- 4213

In Reply, Refer to:
151401SWR04PR13870:MLD

JUN 22 2004

Gretchen Lebednik
Entrix, Inc.
590 Ygnacio Valley Road
Suite 200
Walnut Creek, CA 94596

Dear Ms. Lebednik:

The National Marine Fisheries Service (NOAA Fisheries) has reviewed your letter, dated May 10, 2004, and received in our office May 12, 2004, requesting a list of species potentially present in the vicinity of Ormond Beach in Ventura County, California, for the BHP Billiton Cabrillo Port Liquid Natural Gas (LNG) project. To assist you in evaluating whether or not the proposed project may affect federally protected species and species of concern, I am providing a list of species that may occur in the general project area and maybe influenced by the project. In addition, enclosed is a list of fish species that are managed by fishery management plans under the Magnuson-Stevens Act (MSA) and have been recovered in studies at oil and gas platforms in Southern California.

If the proposed project may adversely affect a listed or proposed species, the U.S. Coast Guard should request initiation of formal consultation with NOAA Fisheries pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). If the proposed project may adversely affect a species of concern, those species for which there is concern or great uncertainty regarding their biological status and threats (64 FR 19975), the U.S. Coast Guard should engage in informal discussions with NOAA Fisheries to discuss ways to minimize or eliminate adverse impacts. Pursuant to section 1855(b)(2) of the MSA, Federal agencies are required to consult with the Secretary of Commerce (delegated to NOAA Fisheries) with respect to "any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat identified under this Act." If the proposed project may adversely affect Essential Fish Habitat (EFH), NOAA Fisheries will coordinate with the U.S. Coast Guard and provide information to further the conservation and enhancement of EFH.

Whales, dolphins, seals, and seal lions are also protected under the Marine Mammal Protection Act (MMPA). Under the MMPA, it is illegal to "take" a marine mammal without prior authorization from NOAA Fisheries. "Take" is defined as harassing, hunting, capturing, or killing, or attempting to harass, hunt, capture, or kill any marine mammal. "Harassment" is defined as any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal in the wild, or has the potential to disturb a marine mammal in the wild by causing

disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering. Based on the information provided in your letter, it may be necessary to receive authorization from NOAA Fisheries under the MMPA for this proposed project.

Thank you for coordinating with NOAA Fisheries regarding this project. Please contact Monica DeAngelis at 562-980-3232 or Monica.DeAngelis@noaa.gov if you have any questions concerning this letter or if you require additional information.

Sincerely,

for Rodney R. McInnis
Acting Regional Administrator

Enclosures (2)

Enclosure 1

List of species that may occur in the vicinity of the Cabrillo Port Liquid Natural Gas project in Ventura County, CA

Common Name	Scientific Name	Status[1]
Marine Mammals		
California sea lion	*Zalophus californianus californianus*	M
Pacific harbor seal	*Phoca vitulina richardsi*	M
Northern elephant seal	*Mirounga angustirostris*	M
Northern fur seal	*Callorhinus ursinus*	M
Gray whale	*Eschrichtius robustus*	M
Blue whale	*Balaenoptera musculus*	M/E
Fin whale	*Balaenoptera physalus*	M/E
Minke whale	*Balaenoptera acutorostrata*	M
Humpback whale	*Megaptera novaeangliae*	M/E
Northern right whale	*Eubalaena glacialis*	M/E
Short-beaked common dolphin	*Delphinus delphis*	M
Long-beaked common dolphin	*Delphinus capensis*	M
Pacific white-sided dolphin	*Lagenorhynchus obliquidens*	M
Risso's dolphin	*Grampus griseus*	M
Dall's porpoise	*Phocoenoides dalli*	M
Bottlenose dolphin	*Tursiops truncatus*	M
Northern right whale dolphin	*Lissodelphis borealis*	M

[1]M= MMPA Protected, E= Endangered under the ESA , C= Species of Concern

Common Name	Scientific Name	Status[1]
Marine Mammals cont'd		
Short-finned pilot whale	*Globicephela macrohynchus*	M
Killer whale	*Orcinus orca*	M
Baird's beaked whale	*Berardius bairdii*	M
Mesoplondont spp.		M
Sea Turtles		
Leatherback turtle	*Demochelys coriacea*	E
Green turtle	*Chelonia mydas*	T/E
Olive Ridley turtle	*Lepidochelys olivacea*	T/E
Loggerhead turtle	*Caretta caretta*	T
Abalone		
White abalone	*Haliotis sorenseni*	E
Black abalone	*Haliotis cracherodii*	C
Pink abalone	*Haliotis corrugata*	C
Green abalone	*Haliotis fulgens*	C
Fish (see Enclosure 2)		
Southern steelhead	*Oncorhynchus mykiss irideus*	T

[1]M= MMPA Protected, E= Endangered under the ESA, T= Threatened, C= Species of Concern

Table 1. Fish species managed under the Pacific Groundfish Fishery Management Plan recorded in scientific studies conducted at oil and gas platforms in southern California. Numbers represent studies listed at bottom of table.

Common Name	Scientific Name	Study
Pacific sanddab	*Citharichthys sordidus*	3,6
Widow rockfish	*Sebastes entomelas*	3,4,6
Bank rockfish	*Sebastes rufus*	6
Black rockfish	*Sebastes melanops*	2
Black-and-yellow rockfish	*Sebastes chrysomelas*	6
Blue rockfish	*Sebastes mystinus*	1,2,3,4,5,6
Bocaccio	*Sebastes paucispinis*	1,3,4,5,6
Brown rockfish	*Sebastes auriculatus*	1,3,2,5,6
Calico rockfish	*Sebastes dallii*	3,5,6
California scorpionfish	*Scorpaena guttata*	1,3,5,6
Canary rockfish	*Sebastes pinniger*	3,6
Chilipepper	*Sebastes goodei*	6
Copper rockfish	*Sebastes caurinus*	1,3,4,5,6
Cowcod rockfish	*Sebastes levis*	6
Darkblotched rockfish	*Sebastes crameri*	6
Flag rockfish	*Sebastes rubrivinctus*	1,3,4,5,6
Gopher rockfish	*Sebastes carnatus*	5,6
Grass rockfish	*Sebastes rastrelliger*	1
Greenblotched rockfish	*Sebastes rosenblatti*	6
Greenspotted rockfish	*Sebastes chlorostictus*	4,6
Greenstriped rockfish	*Sebastes elongatus*	1,6
Honeycomb rockfish	*Sebastes umbrosus*	3
Kelp rockfish	*Sebastes atrovirens*	1,5,6
Olive rockfish	*Sebastes serronides*	1,2,3,5,6
Rosy rockfish	*Sebastes rosaceus*	3,6
Sharpchin rockfish	*Sebastes zacentrus*	6
Squarespot rockfish	*Sebastes hopkinsi*	3,4,6
Starry rockfish	*Sebastes constellatus*	3,6
Stripetail rockfish	*Sebastes saxicola*	5,6
Treefish	*Sebastes serriceps*	5,6
Vermilion rockfish	*Sebastes miniatus*	1,3,6
Yelloweye rockfish	*Sebastes ruberrimus*	6
Yellowtail rockfish	*Sebastes flavidus*	3,4,6
Thornyhead	*Sebastolobus sp.*	4,6
Cabezon	*Scorpaenichthys marmoratus*	1,3,4,5,6
Kelp greenling	*Hexagrammos decagrammus*	1,6
Lingcod	*Ophiodon elongatus*	1,3,5,6
Pacific whiting	*Merluccius productus*	6
Spiny dogfish	*Squalus acanthias*	3

1. Carlisle, J. G. Jr., C. H. Turner and E. E. Ebert. 1964. Artificial habitat in the marine environment. California Department Fish Game, Fish Bulletin 124. 93pp.
2. Allen, M. J. And M. D. Moore. 1976. Fauna of offshore structures. Southern California Coastal Water Research Project, Annual Report., Long Beach, California, pp. 179-186.
3. Love, M. S. and W. Westphal. 1990. Comparison of fishes taken by a sportfishing party vessel around oil platforms and adjacent natural reefs near Santa Barbara, California. Fishery Bulletin, U. S. 88:599-605.
4. Love, M. S., J. Hyland, A. Ebeling, T. Herrlinger, A. Brooks and E. Imamura. 1994. A pilot study of the distribution and

abundance of rockfishes in relation to natural environmental factors and an offshore oil and gas production platform off the coast of southern California. Bulletin Marine Science 55(2-3): 1062-1085.
5. Carr, M. H. and G. E. Forrester. Unpubl manu. Ecological consequence of alternative decommissioning strategies for POCS offshore facilities: preliminary results. Paper presented at the Fifth California Islands Symposium, March 29 - April 1, 1999, Santa Barbara, California.
6. Love, M. Nishimoto, D. Schroeder, and J. Caselle. 1999a. The ecological role of natural reefs and oil and gas production platforms on rocky reef fishes in southern California: Final interim report. U. S. Geological Survey, Biological Resources Division, USGS/BRD/CR-1999-007. 208pp.

Table 2. Fish species managed under the Coastal Pelagics Fishery Management Plan recorded in scientific studies conducted at oil and gas platforms in southern California. Numbers represent studies listed at bottom of table.

Common Name	Scientific Name	Study
Northern anchovy	*Engraulis mordax*	1,2,3
Pacific sardine	*Sardinops sagax*	1,2,3
Jack mackerel	*Trachurus symmetricus*	1,2,3

1. Carlisle, J. G. Jr., C. H. Turner and E. E. Ebert. 1964. Artificial habitat in the marine environment. California Department Fish Game, Fish
Bulletin 124. 93pp.
2. Carr, M. H. and G. E. Forrester. Unpubl manu. Ecological consequence of alternative decommissioning strategies for POCS offshore facilities: preliminary results. Paper presented at the Fifth California Islands Symposium, March 29 - April 1, 1999, Santa Barbara, California.;
3. Schroeder, D. M. 1999. Relative habitat value of oil and gas production platforms and natural reefs to shallow water fish assemblages in the Santa Maria Basin and Santa Barbara channel, California. Pp. 4C-1-4-C-8. *In* M. S. Love, M. Nishimoto, D. Schroeder, and J. Caselle. 1999. The ecological role of natural reefs and oil and gas production platforms on rocky reef fishes in souther California: Final interim report. U. S. Department Interior, U. S. Geological Survey, Biological Resources Division, USGS/BRD/CR-1999-007. 208pp.

ESA listed endangered and threatened species under the jurisdiction of NOAA's National Marine Fisheries Service that may occur off the coasts of Washington, Oregon, and California (As of June 2006)

Marine Mammals		**Status**
Blue whale *(Balaenoptera musculus)*		Endangered
Fin whale *(Balaenoptera physalus)*		Endangered
Humpback whale (*Megaptera novaeangliae*)		Endangered
Sei whale (*Balaenoptera borealis*)		Endangered
Sperm whale (*Physeter macrocephalus*)		Endangered
Steller sea lion - eastern distinct population segment (DPS) (*Eumetopias jubatus*)		Threatened
Killer whales - southern resident DPS (*Orcinus orca*)		Endangered
Northern Right Whale (*Eubalaena glacialis*)		Endangered
Sea turtles		
Leatherback turtle (*Dermochelys coriacea*)		Endangered
Loggerhead turtle (*Caretta caretta*)		Threatened
Olive ridley (*Lepidochelys olivacea*)		Endangered/Threatened
Green turtle (*Chelonia mydas*)		Endangered/Threatened
Marine fish		
Green Sturgeon, southern DPS (*Acipenser medirostris*)		Threatened
Marine invertebrates		
White abalone (*Haliotis sorenseni*)		Endangered
Salmonids		
Chinook (*Oncorhynchus tshawytscha*)	Sacramento River winter, evolutionarily significant unit (ESU)	Endangered
	Central Valley Spring ESU	Endangered
	California Coastal ESU	Threatened
	Snake River Fall ESU	Threatened
	Snake River Spring/Summer ESU	Threatened
	Lower Columbia River ESU	Threatened
	Upper Willamette River ESU	Threatened
	Upper Columbia River Spring ESU	Threatened
	Puget Sound ESU	Endangered
Chum (*Oncorhynchus keta*)	Hood Canal Summer Run ESU	Threatened
	Columbia River ESU	Threatened
Coho (*Oncorhynchus kistuch*)	Central California Coastal ESU	Threatened
	S. Oregon/N. CA Coastal ESU	Endangered

	Lower Columbia River ESU	Threatened
Sockeye (*Oncorhynchus nerka*)	Snake River ESU	Threatened
	Ozette Lake ESU	Endangered
Steelhead (*Oncorhynchus mykiss*)	Southern California DPS	Threatened
	South-Central California DPS	Endangered
	Central California Coast DPS	Threatened
	California Central Valley DPS	Threatened
	Northern California DPS	Threatened
	Upper Columbia River DPS	Threatened
	Snake River Basin DPS	Endangered
	Lower Columbia River DPS	Threatened
	Upper Williamette River DPS	Threatened
	Middle Columbia River DPS	Threatened