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Appendix E

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Seafloor Debris Removal Plan

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SECTION EIGHT - SEAFLOOR DEBRIS REMOVAL PLAN

8.1 Objective

APC will remove all seafloor debris associated with the intake and discharge conduits and the dispositioning operations, and all debris located inside of the pre-designated debris field boundaries as identified in the pre-dispositioning survey performed prior to the start of offshore dispositioning operations. All debris items will be recovered to the surface and disposed at local landfill facilities or recycled if the debris materials are recyclable.

8.2 Debris Field Boundary and Target Items

A debris field boundary has been established at the offshore work site. This debris field boundary has been delineated by a rectangular area that measures approximately 1000 feet in width, centered on the conduit right-of-way, and approximately 3,000 feet in length. This designated debris field encompasses all SONGS 1 conduit related debris targets and all dispositioning operational areas and anchorages. The September 2004 bathymetric and geophysical survey of an area approximately 1,000 feet in width located a total of 61 magnetometer anomalies. The survey contractor, Fugro, reduced the data, combining redundant anomalies, removing insignificant anomalies, and eliminating anomalies located on rock or outside of the trestle construction footprint. The resulting debris target list consists of four potential debris target sites (see Site Map).

8.3 Debris Items

The pre-dispositioning survey will provide a side scan sonar baseline of the seafloor at the work site. Debris items are defined as those objects located on the seafloor or less than five feet below the seafloor and identified as debris associated with the conduit construction or created by the dispositioning operations. Debris items not associated with the conduit construction or dispositioning activities, such as fishing gear and recreational vessel parts, will not be recovered.

8.4 Recovery Plan

Seafloor debris will be recovered as follows:

8.4.1 Post-Dispositioning Debris Survey

A 400% side scan sonar survey will be conducted within the debris field boundaries at the offshore work site after all offshore activities have been completed. Any seafloor debris targets will be identified by this survey.

8.4.2 Target Verification

After the debris survey has been completed, the APC offshore crews will anchor over each debris target and dive on the target to identify it. Buried targets will be excavated by diver held airlift to a maximum depth of 5 feet below natural contours. Targets found to be deeper than 5 feet below natural contours will not be identified. Targets identified as dispositioning related debris will be removed.

8.4.3 Debris Recovery and Removal

Items of debris, after identified, will be rigged and raised to the deck of the derrick barge or support vessel. Rigging methods will depend on the size, weight, and type of debris item. Heavy pieces of debris will be choked with wire rope slings and raised to the surface by the crane. Lighter pieces of debris may be fastened to soft-lines and raised to the surface by hand.

8.5 Debris Disposal Plan

All recovered debris items will be transported to the APC Long Beach shore base and disposed onshore at local landfill facilities or recycled.

8.6 Personnel and Equipment Requirements

The following personnel and equipment will be used to identify and recover seafloor debris. This work is scheduled to take place working 7-day work weeks, 12-hour workdays:

8.6.1 Personnel

- (1) Project Manager
- (1) Foreman
- (1) Crane Operator
- (2) Riggers
- (1) Tugboat Operator
- (1) Crewboat Operator
- (1) Crewboat Deckhand
- (2) Divers
- (2) Diver Tenders

8.6.2 Equipment

- (1) Derrick Barge w/ 80 ton crane and 4-point anchor spread
- (1) Support Tugboat
- (1) Crewboat
- (1) DGPS Surface Navigation Spread
- (1) Industrial Air Compressor
- (1) Jet Pump (150 hp)
- (1) Diver's Air Compressor
- (1) Surface Air Diving Spread
- (1) Airlift

