March 9, 2007

Bill Pfanner
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Comments on the South Bay Replacement Project (AFC 06-AFC-3)

Dear Mr. Pfanner:

San Diego Gas & Electric Company (SDG&E) hereby submits comments for the California Energy Commission’s (CEC) consideration in preparation of its Preliminary Staff Assessment of the proposed South Bay Replacement Project ("SBRP" or "Project"). SDG&E would like to address some of the statements made in LSP South Bay, LLC’s (LSP) Application for Certification (AFC) and provide data to the CEC to include in its Preliminary Staff Assessment. SDG&E’s objective is to assist the CEC in conducting a complete and accurate analysis of LSP’s proposed Project. SDG&E does not express either support for or opposition to the Project.

SDG&E below presents information concerning substation configuration without and with the LSP Project as well as interconnection issues. Following those topics, SDG&E provides information concerning a few environmental matters.

1. Substation Issues

A. Without the LSP Project

SDG&E previously announced that it intends to construct a new substation that fulfills SDG&E’s near-term and long-term planning needs without the LSP Project—a 230/69 kV air-insulated substation (AIS) on approximately 6.7 acres. If SDG&E receives sufficient and acceptable land from the City of Chula Vista, SDG&E intends to relocate the South Bay Substation, which will consist of the demolition of the existing South Bay Substation and construction of a new substation in the vicinity. SDG&E agreed to this relocation in a Memorandum of Understanding with the City of Chula Vista dated October 12, 2004. SDG&E is preparing its “Permit to Construct” application to submit to the California Public Utilities Commission (CPUC) this summer. SDG&E expects the relocated substation based on its original 230/69 kV plan to be in operation by December 2010.
B. Substation With the LSP Project

1) Substation Replacement

LSP has requested that SDG&E change its plans in order to interconnect the generators from its proposed plant to the SDG&E system at three voltages (230, 138 & 69 kV). (AFC, p. 2-82.) SDG&E’s standard AIS configuration for this 3-voltage substation requires about 12 acres. Thus, in order to relocate the existing switchyard, if three voltages are required, the City of Chula Vista would need to provide 12 acres. Alternatively, if SDG&E is not provided with 12 acres, then LSP could obtain the necessary land to accommodate SDG&E’s requirements consistent with Section 5.13 of the Large Generator Interconnection Agreement (LGLA) in addition to the parcel on which the existing substation is located. The CEC’s Preliminary Staff Assessment should recognize that SDG&E’s proposed substation (230/69 kV) does not accommodate the substation configuration in LSP’s application. Contrary to LSP’s suggestion, 6.5 acres is not adequate space to support a 230/138/69 kV air-insulated substation. The reference to “approximately 6.5 acres” in Section 5.1 of the AFC, second paragraph, bullet 3, first sentence (New Substation Phase) should be changed to “approximately 11.7 acres.”

The City of Chula Vista and/or LSP would need to provide adequate land (12 acres) to SDG&E in “fee” ownership for the 230, 138 & 69 kV AIS facilities. The land must be free of contaminants, developed, and pre-graded per SDG&E specifications such that it is construction-ready for installation of footings, conduit, grounding, equipment, and structures that meet applicable codes and standards, including but not limited to the latest revisions of the Uniform Building Code, the National Electric Safety Code and the IEEE Standard 693 Recommended Practice for Seismic Design of Substations. LSP will provide soil boring data, design calculations, and site grading plans for SDG&E approval.

Page 2-83 of the AFC mentions 10 feet separation between duct banks. SDG&E requires 10 foot separation for the 69 and 138 kV underground duct banks, and 20 foot separation is required for the 230 kV underground trench.

2) System Upgrades

In Section 5.4, LSP describes the results and conclusions of the Interconnection Facilities Study ("IFS") performed for the SBRP. The study plan and agreement for the IFS was executed in December 2005. However, SDG&E’s long term transmission plan has identified a different substation configuration if the South Bay Power Plant is not replaced. This plan identified the need to replace the existing South Bay Substation with a 230/69 kV substation.

Section 5.4 of the AFC states that “no Delivery Upgrades would be required.” While this statement is accurate based on the assumptions made in the IFS that was provided to LSP, it is not correct once SDG&E's proposed replacement for the South Bay Substation is placed in service. With this new generation online and a new 230/69kV substation at South Bay, 69 kV lines connecting to South Bay overload under N-1 conditions. The presence of these overloads means that additional 69 kV facilities would need to be built to mitigate the identified N-1 overloads.

Specifically, the required upgrade is to split the existing 69 kV Tie Line 644. This split would create two (2) 69 kV circuits on existing structures instead of the one that exists today; eliminating the overload and reducing the N-1 exposure. The split of TL 644 is driven by the additional injection of power from multiple sources, including the SBRP, into the South Bay 69 kV bus and helps relieve N-1 overloads of TL 644 and TL 642. While there is an existing Special
Protection System (SPS) that monitors these lines, this SPS is not sufficient to mitigate the overloads once the SBRP and SDG&E's 230/69 kV relocation project are in service.

Due to the nature of these upgrades, the timing and funding of these upgrades would be the responsibility of SDG&E and would be assessed during SDG&E's annual grid assessment studies. These upgrades use existing facilities and would likely be exempt from CPUC licensing. However, to fully analyze the proposed LSP project and possible cumulative project impacts, SDG&E believes the above identified 69 kV upgrades should be included in the scope of the environmental review for the South Bay Replacement Project.

3) Miscellaneous Additional Matters

LSP states that pulling manholes for generator ties would not be needed. (AFC, p. 2-80.) Manholes for the 138 kV and 230 kV are recommended, and the design should consider manholes for the interim 69 kV and 138 kV gen ties if they are to be installed underground. For substation communications, SDG&E will install fiber optic cable in addition to the UG electric cable. Also, a new approximately 100 foot tall microwave tower will need to be installed in the new substation. (AFC, p. 2-80.)

LSP mentions that only "minor modifications" are required at the existing 138/69 kV substation to facilitate the interim interconnections. (AFC, p. 2-81.) SDG&E would like to clarify that this interim interconnection would require the build-out of two bays in the existing substation.

Sections 2.4.3 and 5.2.1 state that new transmission structures will be approximately 60 to 80 feet in height. The Preliminary Staff Assessment should disclose that new transmission structures outside the substation could range from 60 to 160 feet in height.

SDG&E requests that the Preliminary Staff Assessment address SDG&E's existing facilities, future facilities and temporary facilities that may be associated with the proposed relocation of South Bay Substation. Specifically, SDG&E needs to be assured that the SBRP, including construction activities, do not affect SDG&E's access and ability to conduct routine operation, maintenance and repair activities on its infrastructure within the project area. This is necessary to ensure that SDG&E continues to provide safe, reliable energy to its customers. Any grading or improvements that affect access to and along the easement or fee owned property and/or gas and electric distribution and transmission lines will prior require written consent from SDG&E.

2. Electric Transmission and Interconnection (With LSP Project)

The Preliminary Staff Assessment should note that the relocation of 138/69 kV substation and all the existing transmission connections are part of the Project. With respect to the relocation of the substation with the LSP Project, the following descriptions should be included in the Preliminary Staff Assessment:

69 kV Transmission Relocation

Relocate six 69kV (TLs 641, 642, 644, 645, 646, & 647) transmission line terminations from the existing South Bay Substation to new South Bay Substation. All new transmission line getaways will be underground. As mentioned in the AFC, there are 3-69kV (TLs 641, 642 & 644) transmission lines terminating into the existing substation from the north and 3-69 kV transmission lines (TLs 645, 646 & 647) from the south. In order to interconnect these transmission lines into the new substation, 69 kV cable riser poles will be
installed east of the new substation. The three 69 kV existing transmission lines approaching from the south (TLs 645, 646 & 647) will connect overhead into the new cable riser poles. New 69 kV double circuit duct banks will be installed underground for an approximate distance of 700 feet from cable riser poles to the 69 kV substation rack. The three existing 69 kV transmission lines (TLs 641, 642 & 644) will approach from north and connect to existing wires of TLs 645, 646 and 647 in order to be extended to the new substation. These 69 kV transmission lines will also connect the new 69 kV cable riser poles and new duct banks.

138 kV Transmission Work

Three 138 kV (TLs 13815, 13823 & 13824) transmission line terminations will need to be removed from the existing South Bay Substation. The existing overhead TL13815 is currently being installed underground north of the existing South Bay Substation. TL13815 will be extended underground to the new South Bay Substation. A new 138 kV cable riser pole and duct bank will be constructed east of the new substation to accommodate termination of the existing TLs13823 and 13824 and bring both 138 kV circuits underground into the new substation.

For the construction of the overhead and underground transmission line relocations described above, SDG&E estimates temporary environmental impact and ground disturbance of approximately 40 foot width due to construction, for each transmission line (69, 138 & 230 kV) relocation.

Section 2.1.6 of the AFC mentions a short overhead 230 kV connection to the Otay Metro Powerlink (OMPL) 230 kV transmission line. (AFC, p. 2-4.) The Preliminary Staff Assessment should make it clear that the 230 kV loop-in to the OMPL line will be underground. Section 2 erroneously provides that SDG&E stated a new substation could take up to 10 years to permit and construct. (AFC, p. 2-6.) The record should correct this and state that the new substation can be placed into service approximately 18 months after SDG&E has obtained all permits and has access to an environmentally acceptable site that is graded to meet its performance needs.

Because existing overhead and underground 230 kV, 138 kV and 69 kV transmission lines are in the easement, SDG&E anticipates that the existing transmission easement will not have adequate space to accommodate temporary generation ties (either underground or overhead). (AFC, Section 5.2.3.3.)

The AFC, IFS and LGIA documents contain inconsistent descriptions of overhead/underground generator interconnection components. The AFC discusses a 230 kV overhead generation interconnection while the IFS and the LGIA describe underground installation. (Section 5.2.1.) The AFC also describes underground 69 kV and 138 kV interim installations for connection of the generators to the existing substation. SDG&E believes that these temporary connections will be installed overhead, however, these installations could be either overhead or underground, as LSP is responsible for paying and constructing them.

Figure 2.1-3 shows a gas line route in the existing transmission line easement. SDG&E anticipates that a new gas line facility in the existing transmission line easement will not be feasible due to existing underground and overhead transmission lines occupying that same easement. Figure 2.3-22 shows construction lay-down areas. LSP should anticipate lay-down areas for construction related to the substation relocation.

Section 5.2.1 describes the loop-in as a 1000 foot long double circuit underground transmission line segment. The loop-in will consist of 2 double circuit underground segments.
because there will be 2 cables per phase in each segment (duct bank). Also, communication fiber optic cable will be installed.

In Figure 5.5-3, the east side of bridge towers contains no wires. In fact, there are 3 outside wires in the vertical configuration on the east leg of the towers. In addition, Figure 5.5-4 should show 230 kV underground transmission located on the east side of the 138 kV underground transmission.

Section 5.2.2.2 states that “[t]he underground transmission cables will be pulled through the conduits and terminated at each end.” LSP should anticipate installing underground vaults for the underground lines connecting generators and the new substation, especially the interim 69 kV and 138 kV (approximately 2,400 and 2,700 feet, respectively). Installing vaults will require additional cable splicing inside those vaults.

Section 5.2.3.3 discusses an alternative route for the interim 69 kV and 138 kV connection. This alternative route proposes a double circuit duct bank within the overhead SDG&E transmission easement. As mentioned earlier in these comments, SDG&E anticipates that there will not be sufficient space within the existing easement for these generator ties. If the interim generator connections were installed underground, 2 cables per phase may be necessary to accommodate the 69 kV and 138 kV thermal rating of the generator ties. Accordingly, 2 underground duct banks may be necessary in order to accommodate both the 69 kV and an additional underground duct bank for the 138 kV generator connection.

With respect to Section 5.3.2.1, the routing of 230 kV will not necessarily run to the existing cable riser pole locations. It is possible that a new 100 foot 230 kV cable riser pole (with foundation) will be needed as part of the loop-in.

With respect to Section 5.5.2.1 entitled “Electrical Effects – Audible Noise and Radio/Television Interference” power transformers and circuit breakers generate audible noise during operation. The substation facilities will utilize space, landscaping, noise barriers, and/or other technologies to ensure that applicable noise ordinances for the location are met.

3. Environmental Information

A. Demolition and Remediation of Current Substation

Section 2.1.5 entitled “Project Phases, and Roles and Responsibilities for Each” states that demolition of the existing switchyard is not included as part of SBP, therefore, it is not considered in the environmental analysis. (AFC, p. 2-4.) The demolition phase of the existing substation, while not the responsibility of LSP, should be included in the environmental analysis along with the remediation of the existing substation, which is not SDG&E’s responsibility. SDG&E’s understanding of the CEC’s approach to the coverage of its analysis as presented at the December 11, 2006 Data Response workshop is that these activities will be covered in the Preliminary Staff Assessment. SDG&E agrees with this approach.

The Asset Sale Agreement between SDG&E and the Port allocates responsibility for plant decommissioning and site remediation. With respect to the South Bay Substation, all transmission equipment and fixtures, including foundations supporting switchyard equipment, were excluded from the sale and remain with SDG&E under the Facility Services Agreement. SDG&E will remove all transmission equipment and fixtures, including foundations supporting switchyard equipment, when the substation is relocated. The Port is responsible for the cost and performance of any further
remediation measures at the existing substation site. With respect to the existing SBPP, the Port is responsible for plant decommissioning, including any related remediation measures.

B. Land Use

Section 2.1.4 of the AFC recognizes that the site is currently zoned “General Industrial.” (AFC, p. 2-3.) In addition, the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (collectively, CVMBP) propose an Energy/Utility Zone designation. The Preliminary Staff Assessment should include an analysis of that potential land use inconsistency. Also, the City of Chula Vista and the San Diego Unified Port District are in the process of developing the CVBMP. The Preliminary Staff Assessment should include a comprehensive discussion of the proposed CVBMP as well as timeline for the CVBMP review and approval process. Until the final CVBMP is adopted, the CEC will need to evaluate the compatibility of SBRP with current land use plans and policies.

C. Biology

With respect to Biology, Section 8.2.3.5.7 identifies the metered gas pipeline necessary to provide fuel to SBRP. This gas pipeline is proposed to cross Telegraph Canyon Creek. Because SDG&E would construct this pipeline in support of SBRP, LSP is responsible for obtaining the permits (which may include a Section 404 Nationwide Permit 12 from the US Army Corps of Engineers, and a 401 water quality certification from the Regional Water Quality Control Board) required for construction of this pipeline.

Regarding “Applicable Laws, Ordinances, Regulations, and Standards,” the Preliminary Staff Assessment needs to acknowledge the SDG&E Natural Community Conservation Plan (NCCP) issued by United States Fish and Wildlife (USFWS) and California Department of Fish and Game (CDFG). LSP’s application does not. (AFC, p. 8.2.2.) SDG&E conducts operation and maintenance activities, and minimizes and mitigates impacts to biological resources, according to the terms of its NCCP.

D. Traffic

LSP concludes that the SBRP does not result in significant traffic impacts. This conclusion conflicts with the Port Master Plan Draft Environmental Impact Report, which concluded significant (including cumulative) traffic impacts. The Preliminary Staff Assessment should reconcile this inconsistency.

SDG&E appreciates your consideration of the foregoing issue in its preparation of its Preliminary Staff Assessment. If you have any questions, please contact me at (916) 492-4248.

Sincerely,

[Signature]
Taylor Miller
Counsel to SDG&E