CALIFORNIA FARM BUREAU FEDERATION

OFFICE OF THE GENERAL COUNSEL

2300 RIVER PLAZA DRIVE, SACRAMENTO, CA 95833-3293 · PHONE (916) 561-5650 · FAX (916) 561-5691

April 11, 2008

VIA U.S. MAIL and E-MAIL

Billie C. Blanchard
California Public Utilities Commission
c/o Aspen Environmental Group
235 Montgomery Street, Suite 935
San Francisco, CA 94104

Lynda Kastoll
BLM
c/o Aspen Environmental Group
235 Montgomery Street, Suite 935
San Francisco, CA 94104

Re: Comments of the California Farm Bureau Federation on Environmental Impact Report/Environmental Impact Statement and Proposed Land Use Amendment for San Diego Gas & Electric Company Application for Sunrise Powerlink Project

Dear Ms. Blanchard and Ms. Kastoll:

I. Introduction

The California Farm Bureau Federation ("Farm Bureau") appreciates the opportunity to comment on the Draft Environmental Impact Report/Environmental Impact Statement ("DEIR/EIS"). Farm Bureau is a non-governmental, non-profit, voluntary membership organization representing farmers and ranchers throughout California including San Diego and Imperial counties, who are impacted by the Sunrise Powerlink Project ("Proposed Project") and the alternatives addressed by the DEIR/EIS.

As the Proposed Project is extensive, so are the potential and probable impacts to agricultural resources. Agricultural operations are inextricably linked to the land and the continued viability of both is dependent upon careful use of the land. A transmission project on the scale proposed here requires careful assessment of the impacts it imposes on agricultural resources and thoughtful methods to reduce the impacts.

These comments are organized to generally follow the structure of the DEIR/EIS. A Summary of the Recommended Changes is attached to these comments as a reference to the specific measures for which we urge incorporation into the DEIR/EIS. Most important is the message to be conveyed here that where mitigation measures are required to reduce impacts to agriculture, these measures must be tangible and enforceable – not left to the discretion of the utility to assess feasibility. As required by the CEQA Guidelines (Title 14, California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act) Section 15091(d):

> When making the findings required in subdivision (a)(1), [changes to avoid or substantially lessen significant environmental impacts] the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.

II. Executive Summary

A. Page ES-25:

Identified are three significant and unmitigable impacts to agricultural resources by the Proposed Project. These three impacts are simply in reference to the categories of agriculture that are used as benchmarks for determining impacts. Like all the impacts assessed, it is impossible to summarize them in a meaningful way for a 150-mile transmission line. In the body of the DEIR/EIS the impacts to agriculture are characterized by acreage impacts, which provide a better, more descriptive measure for what the long-term implications are for agricultural resources in the context of the construction of a major transmission line. The three unmitigable impacts, of course, represent a large number of impacts to specific parcels of land and owners, which impacts may not be mitigable in many cases.

B. Pages ES-38-67, Comparison of Proposed Project and Retained Alternatives:

We address the Proposed Project, the links which comprise the Proposed Project and the various alternatives with reference to the detailed description of the impacts to Agricultural Resources, rather than within the context of the Executive Summary.

C. Pages ES-67 – 107, Impact Summary Tables:

1. Agriculture:

These summary tables categorize the impacts. As indicated previously, Farm Bureau's focus in this proceeding is on matters related to agricultural lands, operations and activities in general. The summary of impacts entitled "Agriculture" referenced at

pages ES-71, ES-76, ES-83, ES-90 and ES-103 will be addressed later in these comments in conjunction with a more specific context.

2. Public Health & Safety:

The summary tables also identify recommended procedures in the "Public Health & Safety" section related to construction activities on agricultural lands. Because the cited potential impact is the same for each link and alternative, the recommendations will be addressed in relationship to this section as overarching comments. These would address the text contained at pages ES-78, 91 and 104.

Impact P-2 refers to grading and excavation in agricultural areas. There is an unsupported presumption made in the underlying discussion, as reflected in this summary, that pesticides and/or herbicides would necessarily be encountered because there is an agricultural connection to the land. It reflects an overly broad assumption and generalization about agricultural operations and the use of products like pesticides and herbicides by agricultural operators. The discussion is based on information that is not credible and the impact and mitigation should be revised. (CEQA Guidelines Section 15064 (f)(5)) With approval of any pesticide or herbicide for use in California, there are specific rules related to their usage which must be adhered to, but are not acknowledged in this measure. The mitigation measure recommended only exacerbates the presumption, which states (see page D.10-20, for example):

> ***Mitigation Measure for Impact P-2: Residual Pesticides and/or Herbicides could be encountered during grading or excavation in agricultural areas***
>
> **P-2a** **Test for residual pesticides/herbicides in agricultural areas.** In areas where the land has been or is currently being farmed, soil samples shall be collected and tested for herbicides, pesticides, and fumigants to determine the presence and extent of any contamination. The sampling and testing plan shall be prepared and conducted by an appropriate California licensed professional and sent to a California Certified Laboratory. Samples shall be tested at a California Certified Laboratory. A report documenting the areas proposed for sampling, and the process used for sampling, testing shall be submitted to the CPUC and BLM for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for handling and excavation of material found to exceed regulatory requirements shall be submitted to the CPUC and BLM (if on BLM land) 30 days prior to construction.

The proposed testing in the mitigation measure should be much more tailored to the specific circumstances regarding the land which is being impacted. Use of chemicals in the agricultural industry is highly regulated and subject to extensive testing and reporting. The website for the California Department of Pesticide Regulation provides a review of the testing and safety procedures inherent in the regulations. (www.cdpr.ca.gov)

Recommendation: The P-2a mitigation measure should be modified to take advantage of the extensive reporting requirements applicable to agricultural operations to better assess any necessity for soil testing and to properly tailor the testing. Agricultural users are required to submit use reports with the County Agricultural Commissioner, which information is accessible under appropriate circumstances. It is more appropriate to tailor any testing to the circumstances required by the particular information obtained. Much of the land susceptible to the transmission construction is grazing land, which typically has negligible chemical use. The revised measure would read as follows:

> Test for residual pesticides/herbicides if appropriate in agricultural areas. In areas where the land has been or is currently being farmed, information shall be requested from the County Agricultural Commissioner to determine if any herbicides, pesticides or fumigants have been used within a time period that would warrant testing soil. If testing is warranted, the sampling and testing plan shall be prepared and conducted by an appropriate California licensed professional and sent to a California Certified laboratory. The plan shall also be provided to the subject landowner. Samples shall be tested at a California Certified Laboratory. A report documenting the areas proposed for sampling, and the process used for sampling, testing shall be submitted to the CPUC and BLM for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for handling and excavation of material found to exceed regulatory requirements shall be submitted to the CPUC and BLM (if on BLM land) 30 days prior to construction. Results shall also be provided to the landowner.

III. Project Description:

A. Page B-32, B-3.1, Structures:

This section explains the type of structures that will be used. It should be noted that the impacts to agricultural operations and property may vary depending on whether a lattice tower or a tubular steel pole is used. Because the lattice towers impose a larger footprint and are more invasive than the pole towers, the particular style of towers used influences the impacts. It is not clear whether the acreage impacts took into consideration the difference in its estimates. Verification should be made that the impacts from lattice, as well as tubular steel poles, were taken into account. As with most of the impacts and how they will be addressed, an important element is the effectiveness of the mitigation measures.

B. Page B-96, Solid Waste Generation:

Discussed here is the treatment of excavate that will be spread along the ROW. In agricultural areas the spreading of soil must be carefully managed, because the quantity and quality of the excavate could impact the soils adjoining the area. Although Mitigation Measure AG-1b (See Table D.6-25, page D.6-97) addresses the need to restore compacted soil during construction, it does not address the treatment of excavate in agricultural areas.

Recommendation: Include in Mitigation Measure AG-1b: Restore Compacted Soil language recognizing the need to cooperate with the landowner to facilitate appropriate treatment of excavated soil as follows (underlining shows new language):

> AG-1b: Restore disturbed and compacted soil. The Applicant shall restore soils compacted or disturbed such as by excavation, during construction by conferring with the property owner or tenant to identify and then implement a mutually agreed means to restore such soils. Restoration actions may include, but are not limited to, disking, plowing, removal of excavated soil, or other restoration methods.

Reference should be made in B.4.8 that applicant will confer with the landowner or tenant in appropriate circumstances for spreading of the excavate.

It should be noted that this section cross-references Section D.14, which in turn refers to this section as B.4.9, which does not exist.

IV. D.6 Agriculture:

A. Page D.6-3:

At the bottom of this page the active agricultural operations traversed by or adjacent to the total Project are shown to total 9.5 acres in Imperial County and within San Diego County total 20.8 acres. Elsewhere in the DEIR/EIS the acreage impacts for active agricultural operations are much higher. (See for example Table D.6-8, page D.6-15, where the active agricultural operation acreage impacted is over 100 acres.) It is difficult to cross-check the calculation, of course, because the agricultural resources are composed of Williamson Act lands, Department of Conservation lands and active agricultural operations. So, there is some overlapping. The best benchmark however, seems to be the total agricultural resources figure. Better clarification is required to convey how the impacts and assessments were calculated to be assured that the appropriate impacts were taken into account.

B. Page D.6-4:

The discussion regarding the Williamson Act cites to the California Administrative Code. The correct reference is to the Government Code, although the section numbers are correct.

C. Page D.6-4, Williamson Act Land Designations:

Although the language here provides a description of what the Act facilitates, it does not provide the underlying purpose of the Act and thus the importance placed on conserving agricultural land and the reasons for the status emphasis.

Recommendation: Language should be included that summarize the findings expressed in the Act at Government Code section 51220 explaining the values, such as:

The Act has several purposes:

- To preserve farmland for a secure food supply for the state and nation and for future generations;
- To maintain agriculture's contribution to local and state economic health;
- To provide economic relief to tax-burdened farmers and ranchers;
- To promote orderly city growth, and discourage leapfrog development and premature loss of farmland;
- To preserve open space for its scenic, social, aesthetic, and wildlife values.

D. Page D.6-6, Dairy Operations (see also pages 6-18 to 6-20):

Insufficient information has been utilized to fairly assess the impacts that the lines, when constructed near dairies, would have. In those instances it does address the impacts, important information is not given due weight.

The DEIR/EIS correctly recognizes the current efforts in Imperial County to provide appropriate conditions for locating new dairies. The discussion does not properly address the issue, as a limited review of permits conducted does not provide sufficient indication of the planning efforts to establish dairies or the imminence of their construction.

Imperial County has invested extensive effort in facilitating the placement of new dairies in the county in close proximity to one another. There are economies of scale and advantages to all in co-location of the facilities.

The need to take into account local planning concerns is an important objective in transmission planning, as reflected in the California Energy Commission's Transmission Corridor Designation Process under SB 1059. One of the objectives which shows the importance of balancing local concerns is reflection by the following:

> To work with local governments through whose jurisdictions a transmission corridor is proposed such that each designation takes into account local concerns, recommendations, and adopted land use designations and results in the cooperation of local governments that consider designated corridors when taking actions to amend general and specific land use plans. (Title 20 Code of Regulations Section 2401(b)).

The DEIR/EIS has not adequately addressed the local concerns in finding suitable mitigation for the inherent conflict between dairies and a 500kV line.

E. Page D.6-13, D.6.4.2, Applicant Proposed Measures:

Table D.6-6 sets out the Applicant Proposed Measures which SDG&E views as sufficient to reduce the impacts to agricultural resources from the effects of the transmission line. APM LU-3, APM LU-4, APM LU-6, APM LU-7 and APM LU-10 are insufficient to clearly and confidently assure landowners that the measures will be taken and impacts reduced.

Each of the measures indentified above includes in it the qualifying terms such as "if feasible", "to the extent feasible", or "should be minimized" without establishment of any criteria to determine how or who shall assess the feasibility. Although The Mitigation, Monitoring, Compliance, and Reporting Program (page I-1) will establish procedures to resolve disputes, such as might arise between the landowner and the utility regarding any appropriate adjustments, there is nothing in the program that explains standards that will be relied upon for resolution.

It is not uncommon for a landowner and a utility representative and contractors to have differing views about reasonableness and feasibility. Pressures to adhere to construction schedules and cost estimates can easily affect the willingness to make adjustments to factors such as schedule, and infrastructure methodologies that could have profound affects on agricultural resources and operations. Because much of agriculture is seasonal in nature, time is also often of the essence. In order for the Applicant Proposed Measures to actually mitigate impacts there must be assurance of reasonable willingness to implement landowners' preferences.

Recommendation: That the proposed Applicant Measures be changed as more specifically set forth in page 10 of these comments to take into account requirements to assure landowner input.

F. Page D.6-15, Table D.6-8, Agriculture Resources Permanently Impacted:

Because the impacts to agricultural resources are so extensive, it would be impossible to completely eliminate the impacts should any of the routes with line construction be selected. No matter which alternatives are selected, there are large tracts of acreage and many operations that will feel the effects of the project. As explained above the key for agriculture will be how the impacts are managed.

Assessing the impacts by acreage totals provides an important starting point. To better demonstrate the impacts, listed below are the links for the Proposed Project and the various alternatives taken from the Executive Summary with estimates of agricultural resources acreage impacted. The estimates were listed in Table D.6-8 and for the alternates contained in the body of the DEIR, in the discussion of Agriculture, within the subheading "Environmental Impacts and Mitigation Measures" for the various alternatives.

Imperial Valley Link - 491.8 acres

- FTHL Eastern Alternative 14.2
- SDG&E West of Dunaway Alternative 0.6
- SDG&E West Main Canal - Huff Road Modification Alternative 15.3

Anza-Borrego Link – 0 acres

- Partial Underground 230 kV ABDSP SR78 to S2 Alternative (with All Underground Option). 38.1
- Overhead 500kV ABDSP within Existing 100-Foot Row (with West of Tamarisk Grove Campground 150-Foot Option) 0.3

Central Link - 250.3 acres

- Santa Ysabel Existing ROW Alternative 52.6
- Santa Ysabel Partial Underground Alternative 17.3
- Santa Ysabel All Underground Alternative 27.4
- SDG&E Mesa Grande Alternative 29.7

Inland Valley Link – 102.0 acres

- CNF Existing 69 kV Route Alternative 7.0
- Oak Hollow Road Underground Alternative 8.0
- San Vicente Transition Alternative 0
- Chuck Wagon Road Alternative 5.9

Coastal Link - 32.8 acres

- Pomerado Road to Miramar Are North Alternative 3.6
- Los Penasquitos Canyon Preserve and Mercy Road Alternative 0

- Black Mountain to Park Village Road Underground Alternative 0
- Coastal Link System Upgrade Alternative 45.1

Substation Alternative to Central East Substation

- Top of the Work Substation Alternative 45.1

Southwest Powerlink (SWPL) Alternatives

- Interstate 8 Alternative (with five segment options) - 351.6 acres
  a. Campo North 0.4
  b. Buckman Springs Underground 35.3
  c. West Buckman Springs Option 67.6
  d. South Buckman Springs Option 20.3
  e. Chocolate Canyon 67.6
- BCD Alternative (With South BCD Option) - 117.7 acres
- Route D Alternative (North of I-8) - 185.7 acres
- Modified Route D Alternative (South of I-8) (with Star Valley Option 1.1) - 656.8 acres

Overall, Table 6-8 provides a useful starting point of comparison of overall impacts to agricultural resources, however, there are several figures contained in the table that require better explanation and/or description. For example, although it is recognized that the columns may not result in simple sums of the various numbers, there may be errors. One error could be the total for agricultural resources in the Imperial Valley link (491.8 acres), which exceeds the components of it. Further, the table shows total DOC Farmland impacted as 344.7 acres, while at pages D.6-23 and D.6-26 the figure used is 663.4 acres. The same concerns over how the impacts were determined would apply to the calculations used for the SWPL Alternatives as well. The acreage impacts for the SWPL Alternatives vary dramatically from one another. Clearer distinctions among the alternatives is required to assess the trade-offs. For example, the modified Route D Alternative forecasts a staggering 656.8 acres of agricultural resources impacted, without an acknowledgement of the significance of the differences with other alternatives. It is necessary to understand specifically the determinations, as a tool in addressing the comparisons of the alternatives.

Recommendation: Table 6-8 should be revised to correct for errors and inconsistencies, with the body of the DEIR/EIS adjusted as necessary. In addition more explanation should be provided to reveal how the acreage calculations were arrived at and included as a legend to the table or in the text itself. Similar refinement should be made to aid in effective assessment of the SWPL Alternatives.

E. Analysis Methodology for Agriculture and Comments Applicable Generally to the Methodology.

The analysis relating to agricultural resources follows a nearly identical outline for each line of the Proposed Project and the various alternatives discussed. The broad outline includes 1) Construction Impacts, with recommended mitigation measures; and 2) Operational Impacts, which recognize the potential for permanent conversion of DOC farmland, permanent interference with active agricultural operations and permanent conversion of Williamson Act lands.

The analysis of impacts to agricultural resources is quite consistent. So consistent that it us nearly generic and thus the vigor of the analysis must be scrutinized. For example, there are segments where assessment and the accompanying mitigation measure should be acknowledged, but were not. In each link and alternative where there will be any construction, access road, excavation or similar activity a requirement for restoring the soil must be included. The analysis and impacts regarding soils is not included in the Inland Valley Link portion. There may be other similar deficiencies.

Aerial application impacts is addressed only for the Imperial Valley link and alternatives. There are portions of San Diego County where aerial application will be an issue and measures similar to those recommended for Imperial County should be used for San Diego County.

Many of the links and alternatives analyzed for impact to agricultural resources affect hundreds of acres of agricultural property. Some of the alternatives assessed, however, are very small – under ten acres in some cases. As a result, in such cases (see for example, page D.6-55 in addressing the West of Dunaway Alternative), the impact is not considered significant, even though the impact of the segment to which the small alternative is tied creates a significant impact that is addressed. The various mitigation measures must be applied throughout the agricultural lands affected to address any concerns. As noted (page D.6-13) even through an alternative used to address a particular concern covers small acreage, the required assessment must be to the Project as a whole.

Every way that analysis is conducted in assessing how agricultural resources are impacted by the Proposed Project and/or the alternatives serves to underscore the importance of the mitigation measures and how they are applied. Unless done properly the significance of acreage impacted that cannot be mitigated will skyrocket dramatically.

F. Mitigation Methodology for Impacts to Agricultural Resources:

The DEIR/EIS has in most cases, and to the extent possible to discern, captured the extensive impact the transmission line can have on agricultural resources and thus the ongoing ability to maintain a viable operation. The weakness in the analysis is the assumption that the mitigation measures or applicant proposed measures will be sufficient as currently crafted to reduce impacts to a less than significant level. (From

Class 1 to Class II or Class III.) The APM's applicable to agriculture are not sufficiently rigorous to ensure reduction of the impacts as the applicable APMs use terms like "if feasible" and "to the extent feasible" thereby leaving far too much discretion to the utility (See Table D.6-6 for listing of Applicant Proposed Measures – Agriculture Resources, page D.6-14).

Despite all of the vague terms in the APM, the DEIR language such as at page 6-16 states that: "As a result of incorporating these APMs, construction of the Proposed Project would not result in damage or loss of crops, obstruction of access to properties, or conflicts with irrigation canals." But the flexibility inherent in each of the APMs for the utility provide no assurance impacts will not be significant in each case. The discussion broadly embraces the APMs and backfills with AG-1a, which appropriately requires more extensive monitoring. More effective are those measures and methodologies developed specifically for agriculture to address impacts, which includes AG-1a, AG-1b, AG-1c, AG-3a, AG-3b and AG-3c, (See pages D.6-97 and D.6-98). To adequately address the impacts the Project imposes, the APMs should be combined with the AG Mitigation Measures or re-crafted to incorporate the more rigorous requirements in those mitigation measures as set forth below. Key to ensuring the mitigation is effective to reduce significant impacts is a demonstration of landowner agreement. The APMs and recommendations for more rigor in the measures is discussed below.

1. APM LU-3:

This APM addresses the issue of crop production and the interference of construction activities with production. During construction a significant area could be out of production. In an area such as the Imperial Valley, where many crops are grown year round it may be impossible to avoid significant affects of construction and could create a short-term, but significant economic impact on individual farming operations. The potential range of impacts are explained in the Testimony of William W. Wood, Jr., Ph.D. on behalf of the California Farm Bureau Federation submitted in Phase I of A.06-08-010. (Exhibit F-1)

If the crop affected is a permanent crop the effects will be much more significant. Only the operator knows best how to minimize the impacts. The timing portion of this APM should be incorporated with AG-1a, although the requirement to compensate for lost or damaged crops must be retained.

Recommendation: Revise AG-1a to include requirement that construction activities be timed to avoid preparation, growing and harvesting of crops.

2. APM LU-4:

This APM addresses access issues and recognizes the importance of ensuring access to properties are not obstructed. As drafted discretion is provided to the utility to determine the feasibility of any necessity to ensure access. There may be cases where access can be limited, but in most cases it must be assured.

Recommendation: This measure should be revised to include an effectiveness criteria that "affected landowners are in agreement with the access made available."

3. APM LU-7

This APM addresses location of facilities. Location of transmission lines can significantly affect the long-term viability of agricultural resources. The DEIR/EIS recognizes the importance of siting any transmission lines along parcels or boundaries, which will not eliminate, but will help ameliorate the long-term effects. Siting can be especially onerous to tree crops. In the past several years, increasing pressure has been placed on the relationship between potential of tree limbs touching transmission lines. The pressure has prompted greater focus at national and regional levels on the clearances between trees and conductors and focus on safety standards as well. (See, for example, OSHA requirements for safety, and NERC requirements) As currently drafted APM LU-7 leaves extensive discretion with the utility and little pressure to cooperate with the landowner. There must be more than a superficial effort to secure appropriate placement.

Recommendation: Revise APM LU-7 to be consistent with the notification, monitoring, reporting and effectiveness criteria of Mitigation Measure L-2b. It does not provide a guarantee to landowners, but does ensure that unlike APM LU –7, there are procedures in place to help objectively assess meaningful compromise.

V. Conclusion:

Agriculture is constantly expected to adapt to changing circumstances of the state. The fact dairies have moved to Imperial Valley is a reflection of the increased pressure from urbanization on finite agricultural resources. The impacts from the Proposed Project and the various alternatives have to be carefully weighed to ensure realistic parameters are established. If a line is approved, then any route ultimately selected will quite likely significantly impact agricultural resources. The only way the significance can be reduced to a point allowing approval is to assure procedures for mitigation to these important resources are fair to the landowner. Placement of a 500vK line on productive land forever changes an owner's ability to manage the ground. Always the owner will have to assess how decisions made address the fact a large, dangerous infrastructure crosses the property.

The California Farm Bureau Federation appreciates your consideration of its concerns and recommendations.

Very truly yours,

KAREN NORENE MILLS

KNM:bg

Summary of Recommended Changes

1. Change to pages ES-78, 91 and 104, regarding soil testing on agricultural land:

Recommendation: The P-2a mitigation measure should be modified to take advantage of the extensive reporting requirements to better assess any necessity for soil testing and to properly tailor the testing. Agricultural users are required to submit use reports with the County Agricultural Commissioner, which information is accessible under appropriate circumstances. It is more appropriate to tailor any testing to the circumstances required by the particular information obtained. Much of the land susceptible to the transmission construction is grazing land, which typically has negligible chemical use. The revised measure would read as follows:

> Test for residual pesticides/herbicides if appropriate in agricultural areas. In areas where the land has been or is currently being farmed, information shall be requested from the County Agricultural Commissioner to determine if any herbicides, pesticides or fumigants have been used within a time period that would warrant testing soil. If testing is warranted, the sampling and testing plan shall be prepared and conducted by an appropriate California licensed professional and sent to a California Certified laboratory. The plan shall also be provided to the subject landowner. Samples shall be tested at a California Certified Laboratory. A report documenting the areas proposed for sampling, and the process used for sampling, testing shall be submitted to the CPUC and BLM for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for handling and excavation of material found to exceed regulatory requirements shall be submitted to the CPUC and BLM (if on BLM land) 30 days prior to construction. Results shall also be provided to the landowner.

2. Change regarding soil restoration:

Recommendation: Include in Mitigation Measure AG-1b: Restore Compacted Soil language recognizing the need to cooperate with the landowner to facilitate appropriate treatment of excavated soil as follows (underlining shows new language):

> AG-1B: Restore disturbed and compacted soil. The Applicant should restore soils compacted or disturbed such as by excavation, during construction by conferring with the property owner or tenant to identify and then implement a mutually agreed means to restore such soils. Restoration actions may include, but are not limited to, disking, plowing, removal of excavated soil, or other restoration methods.

Reference should be made in B.4.8 that applicant will confer with the landowner or tenant in appropriate circumstances for spreading of the excavate.

3. Change to Table 6-8, page D.6-15:

Recommendation: Table 6-8 should be revised to correct for errors and inconsistencies, with the body of the DEIR/EIS adjusted as necessary. In addition more explanation should be provided to reveal how the acreage calculations were arrived at and included as a legend to the table or in the text itself.

4. Changes to Mitigation Measures:

Recommendation: Revise Mitigation Measure AG-1a to include requirement that construction activities be timed to avoid preparation, growing and harvesting of crops.

Recommendation: The APM regarding access should be revised to include an effectiveness criteria that "affected landowners are in agreement with the access made available."

Recommendation: Revise APM LU-7 to be consistent with the notification, monitoring, reporting and effectiveness criteria of Mitigation Measure L-2b. It does not provide a guarantee to landowners but does ensure that unlike APM LU-T, there are procedures in place to help objectively assess meaningful compromise.

Application No.: A.06-08-010
Exhibit No.:
Witness: William W. Wood, Jr. PhD

Testimony of
William W. Wood, Jr. PhD
On behalf of
California Farm Bureau Federation
In the Application of San Diego Gas & Electric Company
For the Sunrise Powerlink Project
Phase 1

KAREN NORENE MILLS
Attorney for
California Farm Bureau Federation
2300 River Plaza Drive
Sacramento, California 95833
Telephone: (916) 561 5655
Facsimile: (916) 561-5659
E-mail: kmills@CFBF.com

June 1, 2007

Estimating Economic Impacts of Power Line Siting on Agricultural Enterprises

William W. Wood, Jr. PhD

Preface

My name is William W. Wood, Jr. and I am a consultant representing the interests of the California Farm Bureau Federation[1] in this proceeding. The testimony addresses that portion of the Phase 1 issues in this proceeding identified in the November 1, 2006, Scoping Memo as critical environmental concerns that inform the CEQA review process, community values and historical and aesthetic values. Although this testimony does not address the need of the project, the topics included are appropriate for consideration in this phase of the case based on the timing of the other portions of the case.

If this project is approved as proposed, it is likely a significant portion of the infrastructure required will impact agricultural properties in San Diego and Imperial Counties. Agriculture is the fifth largest industry in San Diego County and contributes $1.5 billion to the local economy attributable to the on-farm value of the agricultural products. In Imperial County nearly a half million acres are farmed and nearly $1.3 billion in agricultural commodities are produced. In addition to the value to the economy, the farmers of San Diego and Imperial Counties own and maintain vast tracts of open space, plant trees and crops that help improve air quality and provide locally grown products to preserve and

[1] Farm Bureau is a voluntary, non-profit corporation representing nearly 91,500 members throughout California. California farmers and ranchers sell $24.8 billion in agricultural products annually, accounting for 9 percent of the gross state product, and hundreds of thousands of jobs in California.

enhance the overall quality of life in the Counties.

Siting, construction and maintenance of public utility transmission systems on privately owned land will impose both short and long run costs on the owner-operator of that land. In the case of land used in agricultural production, costs incurred may vary significantly from other types of use, but also vary among various agricultural production entities.

The purpose of this presentation is to identify the variables involved and suggest cost analysis approaches as specific sites are evaluated. The magnitude of neither short nor long run costs will be addressed because they are dependant upon the specific parcel of agricultural land identified for facility siting. In addition the unique character of the land impacted coupled with the particular operation may trigger special cost categories that cannot be assessed in a general analysis.

Agricultural Production Systems

Agriculture is highly dependent upon land, climate and water. One classification system used to describe agriculture is intensive to extensive referring to the amount of land required to produce various farming products. Highly intensive includes fresh market horticultural crops such as vegetables and ornamentals. These crops generally require less land area but do require arable land capable of precise tillage. At the other end of what tends to be a continuum is highly extensive agriculture with no tillage, such as that used for seasonal grazing by domesticated animals. Imperial and San Diego Counties contain prime examples of nearly all agricultural land uses in this continuum.

Another facet of agricultural production systems is the cropping cycle. Cropping cycle involves the length of time required from first land preparation to completion of harvest plus climate and quality of soil. The length of time from first land preparation to harvest can vary from a few weeks (specialty fresh market vegetables) to several years (alfalfa). Most tree and vine crops have a multiple decade of years of productive life expectancy. Climates in most agricultural areas of Imperial and San Diego counties are such as to facilitate multiple annual cropping patterns for those crops identified as highly intensive.

Economics of Agriculture

All production systems designed to provide a product for market have fixed and variable costs and an anticipated market price for final product. In this context, agriculture has some unique differences: it cannot guarantee either quality or quantity of final product until harvest and with many producers selling and relatively few direct buyers, the agricultural producer is subject to whatever price is available at time of harvest. Perishability of the product is a particularly significant barrier to price negotiation for fresh market fruits and vegetables.

Fixed costs in agriculture include the cost of land and property taxes, costs of investments (equipment, irrigation system, buildings), and overhead items such as insurance, utilities, etc. Variable costs include labor and materials (seed, fertilizer, fuel). Once incurred, variable costs become fixed for the entire crop cycle, which as noted above may extend for several years in the case of

tree crops.

Agricultural operations generally experience quite low margins of profit and frequently make no return to invested capital. Continuation of farming and ranching is based upon values attached to quality of life other than current income and to the expectation of appreciation in net worth represented by land values.

Short and Long Run Costs

In standard accounting systems, short run and long run costs are comparable to variable and fixed costs and the distinguishing characteristic of time so that such costs are recovered by revenue. The analytical time period is the accounting year. In agriculture, short run relates more to the crop cycle and thus long run denotes those costs incurred into the future over many crop cycles. Thus, loss of one crop due to a construction project is short run, while loss of the land for additional crop cycles into the future constitutes a long term cost.

In the siting of a utility transmission system both types of costs will be incurred. Costs are defined as foregone income because the land is unavailable, operating expenditures necessitated to change farming practices, and investments required to accommodate to long run loss of available land.

--Foregone income includes two situations: when prior notice is presented so that the land area is not prepared and planted and when without adequate notice, site construction begins during a crop cycle but prevents harvest. With

adequate prior notice the foregone income as a cost is the expected net return (gross revenue less production and harvesting costs) that could be attributed to land area impacted by construction. Without adequate notice foregone income as a cost is equal to the anticipated gross revenue from sale of the product. Long term costs would be the expected net return for each crop cycle into the future, i.e. future income stream discounted to present value.

--Operational costs would include such items as protecting plants from dust, restricting use of high profile equipment, altering row direction for certain crops and relocating fences. The distinction between short run and long run will depend upon crop, length of time of needed change and ease of access for both construction and maintenance. Long term investments at some sites may be required to accommodate both construction and maintenance. The most common, but not only, will be fencing in the case of animal agriculture and reconfiguration of irrigation systems for planted crops. In both cases, such costs will be site specific since the size, configuration and access will be the keys in grazing situations, while currently efficient irrigation systems will need alteration to provide adequate pressure and coverage.

One additional cost item warrants mention, particularly with regard to San Diego County. A significant number of farmers farm small parcels of land producing high valued fresh market products. The loss of even a fraction of an acre from a 3-acre operation for even a short period of time may seriously impact the net revenue for that operation. In addition, the short term inability to serve current customers could prove to be economically devastating.

With regard to animal agriculture, there will be potential impacts different from plant agriculture. These impacts involve the response of animals and birds to construction activity as well as to the long term presence of high voltage transmission lines. Each situation will require separate analysis depending upon the type of animal agriculture.

Parcel Access

Unless public roads or informal roads provide reasonable access for both the construction period and subsequent maintenance, potentially more land could be impacted than that considered for siting. Depending upon final route selection, it is possible that some farming operations may be impacted even though such parcel may not be in the selected route corridor.

Economic Analysis

Each individual agricultural operation will have its own set of expected costs and revenue per parcel of land. These expected costs and revenues are a function of commodity and its market price, grower effectiveness in both production and marketing, and the vagaries of weather and pestilence. Proposed routing is specified in linear miles by general types of land ownership and/or use. Land in agricultural use is almost always described by parcel and acreage. Thus, it is not clear how many actual agricultural parcels may be involved in right-of-way acquisition, let alone production by type of crop. A sampling of the types of impacts agriculture faces from transmission line construction is set forth below and segregated between short-term and long-term

impacts.

Short-term Impacts:

A. Construction schedule is announced prior to any preparation of land for a given crop planting and completion within one crop cycle. The cost impact will be the projected net income, i.e., total revenue less total costs, projected for that portion of the total parcel, in acreage or square feet that will be foregone by the producer. Total revenue is yield times price net of marketing costs.

B. When a construction schedule is announced and begun after crop planting. The cost impact will be equal to projected total revenue. The presumption is that nearly all costs have been sunk with no recovery. If the construction schedule is not met, then an additional crop cycle will be added as additional cost. This system of added costs will be continued until construction is completed.

Long-term impacts:

Presuming that the amount of land not available for production is definable, the economic impact is the projected stream of net income (total revenue less total costs) attributable to that unavailable portion of the parcel, discounted by the then appropriate discount rate to determine current magnitude of income. Depending upon crop, "stream of net income" may be annual amounts or crop cycle, where more than one crop can be produced per year.

Many variations on these three models can exist for each parcel

impacted. In addition, the multitude of individual crops could prove to be difficult to accurately assess. An efficient alternative would be to develop norms for categories of crops as at least as a starting point. For such categorization, an initial proposal would include:

Rangeland for grazing
Irrigated pasture
Dry land grains
Irrigated row crops (cotton, sugar beets, etc)
Vegetables (broccoli, lettuce, etc)
Specialty vegetables
Ornamentals
Tree crops

The actual list crops to be assessed in a model would be dependant upon the cropping pattern found to exist in any adopted route.

Estimating Production Costs and Crop Revenue

For major commodities, the University of California Cooperative Extension has developed cost of production estimates based upon local county conditions. Such cost studies assume use of recommended cultural practices and farming size appropriate to available technology. They also attempt to reflect local costs of purchased inputs and market potential.

In terms of revenue, estimates of farm gate income made annually by staff of the Agricultural Commissioner's office are an excellent starting point.

For both of the above sources, a significant set of contributors is always that group of efficient and progressive farmers who cooperate both in research and providing information. Therefore, once an analytical approach is adopted,

farmer input is a critical step.

Conclusion

If this project is approved, only when final route decisions are made will it be possible to further evaluate the economic impacts of the line on agriculture in San Diego and Imperial Counties. In the interim this testimony presented an overarching view of the impacts to various categories of agricultural operations from the myriad proposed routes under discussion for the Sunrise Powerlink. Because land and its effective usage are vital in any agricultural operation, the impact on land from the placement of towers and other facilities is highly relevant to the overall sustainability of agricultural enterprises. Transmission line design and engineering are essential considerations and appropriate adaptation of the facilities to the sites is vital when taking into account impacts to agricultural properties.

WILLIAM W. WOOD, JR.
Policy Economist
Department of Soils Environmental Sciences
University of California
Riverside, CA 92521

EDUCATION: Union High School
B.A. in Political Science, Occidental College, Los Angeles, 1951.
Additional study in Agricultural Economics at UC Davis.
MS. and Ph.D. in Agricultural Economics at UC Berkeley, 1963, 1965.

EMPLOYMENT: 1951-52, California Almond Growers' Exchange
1952-61, Assistant Manager, Almond Marketing Order
1961-64, Giannini Foundation of Agricultural Economics, Berkeley
1964-1991, Economist, Cooperative Extension,
Stationed on Riverside Campus of University of California
1991- Present, Private Consultant

FIELDS OF INTEREST:

Public policy analysis and development, resource management and planning, local and state governmental finance, agricultural and food policy

UNIVERSITY RESPONSIBILITIES:

- Coordinator for Economics, Cooperative Extension, University wide, 1971-78
- Lecturer, Department of Economics, UC Riverside, 1966-1981
- Program Director, Agricultural Economics and Community Resource Development, 1981-88.

NATIONAL ACTIVITIES:

- Chairman, Western Extension Marketing Committee, 1969-70
- CAST Team to analyze implication of U.S. Senate Tax Revisions, 1973
- Chairman, Western Public Education Committee, 1975-76; 1980-81
- ECOP Task Force on Commercial Agricultural Education Needs, 1973-74
- Consultant, Nevada Legislature on Land Use Policy, 1975
- Chairman, National Public Policy Education Committee, 1978-79
- Instructor in Public Policy, Extension Winter School, University of Arizona, 1976, 1977, 1978 1979. Evaluation Course, 1980
- Chairman, National Ad Hoc Committee on Price Determination, 1973 -74
- Advisory committee, University of Missouri Special Needs Project on Needs of Commercial Family Pans, 1976-80
- USDA Prime Lands Task Force, 1975
- Director, Extension Program Evaluation, Washington, DC, 1978-80
- Advisory committee. University of Missouri, Project to determine educational and research needs of commercial farmers
- National Public Policy Education Committee, 1977; Vice Chairman, 1977-78; Chairman, 1978
- Congressionally mandated evaluation of Extension programs: Chairman,

CURRICULUM VITAE

Design Team, Feb-April 1978; Project Director, April 1978, 1978 through January 1980

INTERNATIONAL ACTIVITIES:

- Marketing Consultant, Iran 1967
- Land Use. Policy, Ministry of Agriculture, Queensland, Australia, 1975
- Market Projections, National Bank of Mexico, 1973
- Public Policy Education Consultant, Alberta and Saskatchewan, Canada 1979

UNIVERSITY SERVICE:

- Staff Organization, Division of Agricultural Sciences, UC of Riverside, Chairman, 1968-70
- Giannini Foundation of Agricultural Economics, Research Advisory Committee, 1971-77
- University Committee of Consultants to State Water Resources Control Board and National Commission on Water Quality, 1973-77. Served as only Social Scientist member
- University Vice-President's CRD Advisory Committee, 1975-78
- California Rural Affairs Council, University representative, 1975-78
- Giannini Foundation Executive Committee Member, 1991-88

TEACHING:

- Lecturer, Department of Economics, UC Riverside
  Econ 157 .Economic Analysis of Agricultural Policy
  Econ 158 - Agriculture in Economic Development
- Extension Winter School, University of Arizona, 1976, 77, 78, 79, Course in Public Policy

ADMINISTRATIVE:

- Coordinator, Economics Programs, Cooperative Extension Statewide, 1971-78
- Project Director, National Evaluation Of Extension, 1978-80
- Program Director-AECRD, 1981-88

PUBLICATIONS

U.S. Exports and Imports of Selected Agricultural Products; co-authored by Kenneth R. Farrell and Marion O'Regan, issued by the University of California at Berkeley, 1963.

Federal Marketing Orders and Agreements for California Fruits, Vegetables, and Tree Nuts; co-authored by Kenneth R. Farrell issued by the University of California Agricultural Service, Berkeley, 1963.

The Rationality of Consumer Food Purchasing in an Affluent Society; issued by the University of California Agricultural Extension Service, Berkeley, 1965.

Economics of Production; published in the Proceedings of Turf, Landscape Tree and Nursery Conference, University of California, Davis, 1966.

CURRICULUM VITAE

Agriculture in Regional Economic Development and Resource Management; in "Systems Approach to Management of Resources," University of California, 1967.

Economics of Alternative Sprinkler Irrigation Systems; proceedings of Technical Conference, Sprinkler Irrigation Association Denver, 1968.

Agriculture in an Industrial Economy – Romanticism, Indifference and Economic Reality; University of California, 1968.

Agricultural Land Use Planning; in "Patterns on the Land." University of California, 1969.

Land Use in California: The Next 50 Years; California Farm Bureau Monthly. 1969.

Land Use Planning; Joint committee on Open Space, California Legislature, 1969.

The Competition of Land; American Society of Agricultural Engineers, 1970.

Land Use Planning: Conflicts in Policy Formation and Implementation; mimeo, Cooperative Extension, University of California, 1973.

Local Government's Responsibility in Resource Management; mimeo, Cooperative Extension, University of California, 1973.

Environmental Quality, Energy Use, and Agricultural Productivity: Choices, Trade-offs and Costs; mimeo, Cooperative Extension, University of California, 1973.

An Analysis of Dairy Waste Management Alternatives: Cooperative Extension, University of California, Riverside, 1973, with Bishop, Fairbank, Oliver, Sen and Smith.

Conflicts and Their Resolution--The Process of Land Use Planning: in Resolving Conflicts to Manage Growth, County of Stanislaus 1972.

Preparing a Landscape Contracting Bid; Arizona Landscape Contractor's Association, 1973.

Analyzing Costs Against Bids; Arizona Landscape Contractor's Association, 1973.

Allocating Resources for Golf Course Maintenance; MA-73, Cooperative Extension, University of California, with John Van Dam, 1974.

Land Use Policy Education in Stanislaus County, California; in Increasing Understanding of Public Problems and Policies, Farm Foundation, Chicago, 1974.

Evaluation of Agriculture as a Permanent Use in the Irvine General Plan, for the City of Irvine in conjunction with Wilsey & Ham, 1974.

Estimating Costs and Pricing Services; Southern California Pest Control Operators, 1974.

Estimating the Cost of Producing Container Grown Woody Ornamentals; Washington State Nurserymen's Association, 1974.

CURRICULUM VITAE

Developing Marketing Strategies for Nursery Products; Washington State Nurserymen's Association, 1974.

Estimating Costs of Quality Changes in Using Waste Water for Irrigation; in California Agriculture, Vol. 28, No. 7, 1974.

The Role of Water in Land Use and Growth, mimeo, Cooperative Extension, University of California, 1975.

Planning the Use of Agricultural Land – In Whose Interest? mimeo, Cooperative Extension, University of California, 1975.

Evaluation of the Iowa State University Report on the Economic Impacts of Abatement Control of Irrigation Return Flows and Pollutant Runoff from Non-Irrigated Agriculture; mimeo, Cooperative Extension, University of California for the National Commission on Water Quality, 1975.

Methods of Estimating Demand and Identifying Markets; California Christmas Tree Growers Association, 1975.

The Implications of Land Use on Agriculture; American Institute of Planners, 1975.

Distributing Costs for the Kings County Water District; Report to the Rings County Water District, 1976.

Probable Impacts of Restricting Irrigation Water for Feed Grains and Forage Production; prepared for the State Department Of Water Resources, 1976, with J.H. Cothern and G.V. Ferry.

The Impact of Property Taxes on Agriculture as compared to Other Forms of Taxation: California School Board Association, 1976.

Prime Lands - Definition and Policy Problems; American Journal of Agricultural Economics, Vol. 58, No. 5, 1976.

California's Future: Resources for Agriculture; in Community Development Research Series, report of a special workshop sponsored by the California Rural Affairs Council, 1977.

Pressures on Agriculture: 1. Land Use Policy University of California, 1977.

Comments on Provisions of the Reclamation Act of 1902 and the Proposed Rules and Regulations for Enforcement; Bureau of Reclamation, Washington, D.C. 1977.

Role of Small Farms in American Agriculture and Rural Society; in Increasing Understanding of Public Problems and Policies, Farm Foundation, Chicago, 1978.

The Costs for Spray Irrigation Land Disposal of Municipal Wastewater in California; in Proceedings of the International Water Reuse Symposium, Washington, D.C., 1979, with Dale R. Hurd, Victor B. Youngner and Gary S. Benoit.

Issues over Farmland in "Northern California Review of Business and Economics," California State University, Chico, 1980.

CURRICULUM VITAE

Benefits of Irrigation to Consumers in "Irrigation: Challenge of the 80's;" American Society of Agricultural Engineers, October, 1980.

Labor Requirement Analysis in Landscape Management, 1981; with J.S. Van Dan and J.W. Mamer.

Future Directions of Extension Economics Program, AJAE, Vol.64, No. 5, December 1982.

Probable Economic Impacts of a Marketing Order for Kiwi Fruit, Hearing Record, USDA, February 1984.

An Exploratory Examination into Factors Contributing to the Conversion of Agricultural Land; Philip D. Gardner, Keith Wideman and William W. Wood, Jr., University of California, Riverside, February 1985.

Farm Real Estate Price Components in Fresno County, California, Giannini Foundation Research Report. August 1985.

Everybody's Guide to Water Terms, Leaflet 21403, UC Water Committee, January 1985.

University Expertise and Water Policy, Leaflet 21417, UC Water Committee, April 1986.

Achieving Successful Extension - Research Interfaces Impacts of Organizational Structure, AAEA, Michigan State, August 1987.

Program Plans Toward the 21st Century – A Continuing Assessment of Critical Issues for Potential Programming - Southern Region, Cooperative Extension, DNR - 33 pages.

Farmland in California - A Changing Resource, with M.J. Singer and C.D. Lynn in "Agriculture in California - on the Brink of a New Millennium", pp. 53—67, Agricultural Issues Center, UCD. 1990.

Criteria and Analytical Principles for Determining Compatible Uses Under Williamson Act Contracts - 14 pages; for Department of Conservation, Resources Agency, State of California, February, 1991.

G:\WP60\KAREN\DOCUMENT\William W Wood, Curriculum Vitae.doc