



May 26, 2012

Mr. Byron Washom  
Director Strategic Initiatives  
Vice Chancellor of Resource Management Planning  
University of California, San Diego  
9500 Gilman Ave  
La Jolla, CA 92093

**RE: UCSD- SDG&E Proposal to the Department of Energy on Improvements in Solar Forecasting**

Dear Mr. Washom and Profs. Kleissl and Coimbra,

San Diego Gas & Electric Company (SDG&E) submits this letter in strong support of the Subject Proposal by UCSD to the Department of Energy. We confirm our intent to participate in the project and to actively support development of UCSD's project which will be highly relevant to SDG&E's electric utility smart grid activities.

UCSD and SDG&E are collaborating on several initiatives and have an ongoing relationship in developing sustainable energy projects and collaborative research. The anticipated increase in PV penetration and energy storage has the potential to significantly complicate or enhance the operation of local electricity distribution networks and transmission grids, to ensure resource adequacy. These PV resources are smaller than traditional central-station generating plants and are frequently connected to the distribution network, rather than to the transmission grid. The unique coastal location of our service territory also causes unique solar forecasting challenges. To date, existing solar forecast providers have not been able to provide forecast at an accuracy level that was acceptable to SDG&E, especially given the anticipated significant solar build-out in the region. We are confident that the UC San Diego team has the expertise to develop technology – from sky imagery to numerical weather prediction and forecast engines – that will result in forecasts that exceed our desired forecast specification.

The proposed project addresses the important issue of providing accurate forecasts of local PV solar resources include developing advanced techniques and models to accurately forecast solar PV resources in the San Diego region. SDG&E supports this novel project proposal and is committed to providing solar resource and power output data to train and validate the solar forecast models, and assist in developing forecast metrics and estimating forecast value to our operations.

Assuming UCSD is awarded the grant by the California Solar Initiative, this letter confirms SDG&E's intent to work in close collaboration with UCSD. While SDG&E feels there is value and benefits from this project, this endorsement in no way commits SDG&E to any monetary

commitment for this project. SDG&E is looking forward to working closely in collaboration with UCSD on this project.

Sincerely,

Danny Zaragoza  
Director Electric Distribution Operations  
San Diego Gas & Electric Co.

Cc: Dave Geier  
Vic Romero  
Dallas Cormier  
William V. Torre