

**IEEE – Power
Engineering
Society**

**Wednesday
June 11**



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

San Francisco Chapter Presents:

Past Present & Future of Solar Thermal Generation

DATE & TIMES

*Wednesday, June 11
12 p.m. – 1 p.m.*

PLACE

*Pacific Gas & Electric Office
77 Beale St.
Room 305
San Francisco*

*Check in with guard to verify
your name on IEEE PES list*

INFORMATION

*Closest BART Station is
Embarcadero*

RSVP REQUIRED

*RSVP before Date to:
Anupama Pandey
415-369-1096
apandey@nexant.com*

LUNCH

*Free for IEEE members
\$5 for non-members
RSVP required*

In response to the energy crisis of the early 1970's, the US Department of Energy initiated a range of R&D activities in central receiver, parabolic trough, and dish Stirling solar thermal technologies. The most ambitious of the DOE activities was the 10 MWe, \$150 million Solar One central receiver power plant near Barstow, California. Powerful tax incentives in the 1980's led to the private financing and construction of 9 parabolic trough projects in the California Mojave Desert. In the 1990's, the DOE and several Southwest utilities cooperatively financed a retrofit of the Solar One central receiver project to an advanced, nitrate salt technology.

Today, several privately-financed parabolic trough projects are under development, driven by a favorable combination of a 30 percent investment tax credit and utility renewable portfolio standards.

In the future, technical developments could include large (>100 MWe) nitrate salt central receiver power plants, and the use of inorganic coolants in parabolic trough collector fields.

Mr. Bruce Kelly has 30 years of experience in design, engineering, and economic assessment of advanced renewable energy conversion systems and is a renowned expert in the area of solar thermal technologies. He has been responsible for the conceptual, preliminary, and final design and economic analysis of advanced solar thermal energy systems, emissions systems for fossil-fired distributed generators, and hydrogen delivery infrastructures.

Mr. Kelly holds a B.S. in Mechanical Engineering from the University of California, Berkeley, 1973 and a M.S. in Mechanical Engineering University of California, Berkeley, 1976. He is a registered mechanical engineer in California and a member of Tau Beta Pi. He has co-authored several papers on solar thermal energy and is co-holder of a patent on an air-cooled central receiver concept.