

**IEEE – Power
Engineering
Society**

Monday, March 3rd

Hosted by the:

California Public Utilities Commission



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
San Francisco Chapter Presents:

Holistic Transmission and Resource Planning

DATE & TIME:

Monday, March 3rd at 12 Noon

LOCATION

*CPUC Building
Courtyard Training Room
505 Van Ness Ave.
San Francisco*

INFORMATION

*Use Civic Center BART station
or Van Ness MUNI station*

RSVP REQUIRED

*Space is limited to 60 people.
RSVP required for lunch count.*

RSVP by February 29th to:

*Chuck Magee
415-703-4683*

pesnews@yahoo.com

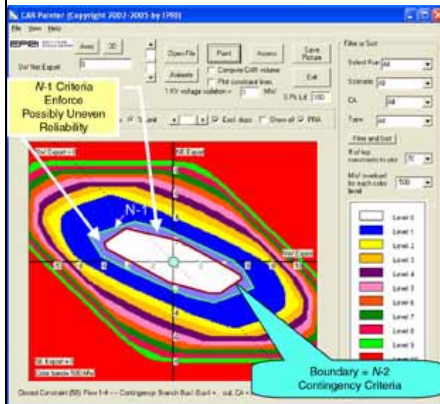
LUNCH

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

Holistic planning is a new concept that recognizes the reality of today's fragmented organizational structures of the power industry and is a philosophy and methodology that attempts to reap the benefits of optimal resource allocation without reverting to a fully integrated and highly regulated environment. Two aspects of holistic planning will be discussed: transmission planning and resource planning. Transmission planning has become a difficult challenge. With so many uncertainties affecting it and so many players involved, a new technical approach is needed to design a future power grid that is robust and that can handle all reasonable ways in which it will be used. Transmission planning cannot be done holistically without considering resource planning, demand options, and global climate concerns. Where new generation resources will be built will greatly affect transmission planning. To handle holistic resource planning, we will discuss the idea of using a CO₂ charge and a public benefit

fund (PBF) to facilitate the market's optimal adoption of different alternatives, implementing the concept of Unity in Diversity as a way to steer individual's choices into decisions that also benefit society as a whole.

Dr. Lee will also demonstrate the EPRI CAR (Community Activity Room) computer program which is used for grid operations and planning. The program graphically plots the many constraints on the system enabling an operator or planner to visually determine if he/she is safely operating within the limitations of the system at any given time or planning correctly.



EPRI Car Program

Stephen T. Lee is senior technical executive, power delivery and utilization, at the Electric Power Research Institute, Palo Alto, California. He recently authored an article in the October/November edition of the IEEE Power and Energy Magazine titled, "For the Good of the Whole" on the subject of holistic transmission and resource planning. Dr. Lee has over 40 years of electric power industry experience. He received his B.S., M.S., E.E. and Ph.D. from M.I.T. in electrical engineering, majoring in power system engineering, in 1969, 1970, 1971, and 1972, respectively. He worked for Stone & Webster Engineering Corporation in Boston, Massachusetts; Systems Control Inc. in California; and was vice president of consulting for Energy Management Associates. Before joining EPRI in 1998, Dr. Lee was an independent consultant in utility planning and operation. At EPRI, he manages technical research programs for power system planning and operations.

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**Wednesday
April 2**



Hosted by: *California Public Utilities Commission*

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

San Francisco Chapter Presents:

The CPUC Renewable Portfolio Standard

DATE & TIME:

**April 2, 2008, 12:00 Noon
to 1:00 pm**

**LOCATION: Public
Utilities Commission,
Courtyard Room, 505
Van Ness Ave., San
Francisco, CA 94102**

INFORMATION

RSVP REQUIRED

*Space is not limited, but RSVP
required for lunch count.*

*RSVP by March 31 to: Julian
Ajello, j.ajello@ieee.org,
415-703-1327*

LUNCH

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

The California Renewables Portfolio Standard (RPS) Program was established by Senate Bill (SB) 1078 (2002) and amended by SB 107 (2006). The law requires that each retail seller of electricity increase its procurement of eligible renewable energy resources by at least one percent of annual retail sales per year so that 20 percent of its retail sales are supplied by eligible renewable energy resources by 2010. The CPUC is responsible for determining annual procurement targets, approving utility procurement plans, overseeing the IOUs' annual renewables solicitations, reviewing RPS power purchase agreements and assessing compliance with annual targets. The CEC establishes the renewable resources eligibility guidelines and certifies RPS facilities. Thus far, the CPUC has approved 80 RPS contracts with the IOUs for nearly 4,000 MW. While the RPS procurement and contracting process has been successful, only about 340 MW of the approved projects have come online - project development (e.g. permitting, transmission upgrades) continues to delay project online dates. While now working with other agencies to implement solutions to these project development hurdles, the CPUC continues to refine the RPS procurement processes, track progress with the RPS goals and consider additional ways to comply with the RPS program.



Sara Kamins is a policy analyst in the California Public Utilities Commission's Energy Division. Her main responsibilities include developing and implementing the Renewables Portfolio Standard (RPS) policy framework, evaluating renewable energy power purchase agreements and coordinating RPS policy design with the Greenhouse Gas policy design. Sara received her Masters of Science from the Energy and Resources Group (ERG) at UC-Berkeley in May 2006, where she developed an optimization model of California's electricity sector to analyze the costs and effectiveness of several global warming policies. Before attending ERG, Sara worked at the Global Energy Network Institute, a non-profit in San Diego, where she helped develop and market the KLD Global Climate 100SM Index, an index fund designed to promote investment in public companies whose activities help mitigate the causes of climate change. Her experience also includes work for other Bay Area non-profits, political offices in Washington D.C. and the United Nations Environmental Programme in Paris.