## CCSF Lunch Summary Distributed Energy Systems Research for a Low Carbon Economy December 15, 2008

## Attendees

Host - Max Zhang, kz33
Host - Tim Mount, tdm2
Ray Zimmerman, rz10
Host - Bob Thomas, rjt1
Lindsay Anderson, cla28
Frank DiSalvo, fjd3
Wesley Sine, wds4
Helene Schember, hrs6
Carlos Murillo-Sanchez, cem14
David Dieterich, dd355
Betta Fisher(Elizabeth), emf4

Zellman Warhaft, zw16 Fred Gouldin, fcg2
Dan Roth, dnr6 Ben Ho, bth26

Kieran Donaghy, kpd23 William Lesser, whl1
Chuck Greene, chg2 Jimmy Chang, cc434
David Hammer, dah5 Antonio Bento, amb396

David Hammer, dah5

David Filiberto, dmf22

Terry Jordan, tej1

Antonio Bento, amb396

Al George, arg2

Steve Beyers, smb75

David Caughey, dac5 Mark Lawrence, mal64
Dean Koyanagi, drk5 Francis Vanek, fmv3
Dick Schuler, res1 David Lieb, djl5

## Regrets

Bob Howarth
Rick Almenginger
Drew Harvell
Larry Brown
Al Center
Oliver Gao
Tobias Hanrath
Sidney Leibovich
Aija Leiponen
Johannes Lehmann
Mark Milstein
Sidney Saltzman
Elizabeth Sanders
Jeff Tester

Ying Hua Larry Walker
Andrew Hunter Steve Wolf

## **Summary**

The lunch meeting started with an introduction of the vision for a low carbon economy and the role of intelligent distributed energy systems (iDES) by Tim Mount. Then Max Zhang elaborated the components within the iDES, followed by a description of the research and education agendas for the iDES. Bob Thomas further introduced the smart grid concepts, a key enabling technology for iDES, and various initiatives within the Department of Energy on this subject. Next, the attendees introduced themselves and their potential contributions to an iDES program at Cornell.

The meeting ended with a strong consensus that the movement toward iDES has already started and that Cornell should play a large role in the transition. The iDES and the smart grid concepts will be able to bring together researchers with expertise in engineering, environmental studies, public affairs, and behavioral sciences. In addition, there is good potential to establish a smart grid demonstration project on campus in synergy with the Cornell carbon neutrality initiative, and within the Ithaca community (e.g., the Ithaca Car Share program).

There were several potential research topics (in addition to what the hosts presented) proposed by the attendees, including studies on infrastructure planning for the smart grids, linkage between the agricultural, the electric utility and the transportation sectors, emissions and environmental assessments for distributed energy generators. We plan to explore these topics with some focus groups in the New Year.