

## OUT OF CONTROL: COMPARISON GROUPS WHOLE-BUILDING

*Moderator: M. Sami Khawaja, Cadmus*

### PAPERS:

#### **Finding Your Perfect Match: A Qualitative Investigation of Matching Approaches**

Abigail Nguyen, Applied Energy Group  
Kelly Marrin, Applied Energy Group  
Katherine Chiccarelli, Applied Energy Group  
Andrew Lee, Pacific Gas and Electric Company

#### **Model-Based Matching and Other Benefits of High-Frequency Interval Data**

Lullit Getachew, DNV GL  
Jon Farland, DNV GL  
Ken Agnew, DNV GL  
Valerie Richardson, DNV GL  
Gomathi Sadhasivan, DNV GL  
Peter Franzese, California Public Utilities Commission

### SESSION SUMMARY:

The papers in this session explore different methods of finding the best comparison group for conducting billing analysis when random control trial is not an option. One paper explores two possible advantages of Advanced Meter Infrastructure (AMI) data for the development of matched comparison groups. The other paper investigates the relevance and applicability propensity score matching and Euclidean distance matching using real utility data for a diverse, residential population by simulating EM&V analyses on three typical demand response and behavioral programs.