

October 31, 2012

MEMORANDUM FOR: JOHN CONTI
ASSISTANT ADMINISTRATOR FOR ENERGY
ANALYSIS

PAUL HOLTBERG
TEAM LEADER
ANALYSIS INTEGRATION TEAM

JAMES TURNURE
DIRECTOR
OFFICE OF ENERGY CONSUMPTION AND EFFICIENCY
ANALYSIS

FROM: BUILDINGS CONSUMPTION & EFFICIENCY ANALYSIS
TEAM

SUBJECT: Second AEO2013 Buildings Sector Working Group Meeting
Summary (presented on 10-04-2012)

Attendees: Erin Boyd (DOE PI)
James Berry (EIA OES)
Katie Lewis (EIA OES)
Danielle Mayclin (EIA OES)
Fred Mayes (EIA OEA)
Bill McNary (EIA OES)
Jay Olsen (EIA OES)
Alan Swenson (EIA OES)

Attending by Phone: John Ackerly (Alliance for Green Heat)
Justin Baca (SEIA)
Matthias Bell (Rocky Mountain Institute)
JD Doliner (Alliance for Green Heat)
Xiaojing Sun (Georgia Tech)
Alexander Smith (Georgia Tech)
Frances Wood (OnLocation)Sonia Yeh (UC Davis)

Presenters: Erin Boedecker
Owen Comstock
Behjat Hojjati
Kevin Jarzomski
David Peterson
Steve Wade

WORKING GROUP PRESENTATION FOR DISCUSSION PURPOSES ONLY

DO NOT QUOTE OR CITE AS RESULTS ARE SUBJECT TO CHANGE

The buildings presentation provided a discussion of the progress on projects and preliminary results for AEO 2013. An overview of the projects discussed is included in the presentation materials provided as a separate attachment.

Specific discussion/questions:

1. When discussing residential consumption projections by fuel, a participant asked about the reduction in electricity consumption given the increase in cooling degree days. The declines in lighting and other end uses were discussed. After the meeting EIA staff discovered a glitch in the presentation slide. Although electricity intensity is expected to decline, with the correction, electricity consumption increases over the projection period in the preliminary results.
2. Solar-related discussion included comments that third-party financing for solar photovoltaic (PV) systems could result in an instantaneous positive cash flow for the end user and that the majority of commercial systems being installed do use third-party financing. NEMS does not currently include this type of financing option, but residential systems are being modeled as financed with the mortgage. A participant also commented that the average installed cost for PV in Germany is about half the cost in the U.S. and a what-if scenario using these costs would be interesting. EIA staff responded that alternative cases included in the AEO do use lower cost assumptions for PV including a low cost renewables case and the No Sunset and Extended Policy cases that extend the current 30 percent tax credit throughout the projection period. Another participant added that the difference in PV costs between the U.S. and Germany are primarily in the area of soft costs: permitting, installation, etc. and the reductions may not extrapolate to the U.S.
3. Participants asked for an explanation of the increase in potential penetration in existing commercial buildings to one-tenth the penetration into new construction. EIA staff explained that penetration is modeled in terms of a share of new construction. Existing buildings provide a much larger market than new construction, so a smaller share still constitutes a large number of systems. During the discussion of EIA's increase in near-term commercial PV installations to capture recent trends and programs, a participant mentioned a new report available at SEIA's website on the recent trend in commercial installations.
4. A participant commented that even with increased PV capacity, the amount of attention being paid to a technology that doesn't amount to a lot of energy is surprising.

Complete Listing of Invitees:

Ackerly, John (Alliance for Green Heat)
Alex, Aileen (DOE)
Alschuler, Elena (DOE EERE)
Amann, Jennifer (ACEEE)
Ames, Mark (ASHRAE)
Anderson, David (PNNL)
Antypas, Yanna (EIA OEA)

Baca, Justin (SEIA)
Baek, Young Sun (ORNL)
Barbour, Edward (Navigant)
Barker, Breton Nmn (DOE EERE)
Bell, Mathias (Rocky Mountain Institute)
Belzer, Dave (PNNL)
Bergman, Aaron (DOE PI)
Berry, James (EIA OES)
Blessing, Colleen (EIA OC)
Brodrick, James (DOE EERE)
Broene, Thomas (EIA)
Brown, Marilyn (Georgia Tech)
Carroll, Ryan (Alliance for Green Heat)
Cogan, Jonathan (EIA OC)
Conti, John (EIA OEA)
Cureg, Edgardo (EIA OES)
Cymbalsky, John H (DOE EERE)
Daniels, David (EIA OEA)
deLaski, Andrew (Appliance Standards Awareness Project)
Dion, Jerry (DOE EERE)
Dirks, James A (PNNL)
Doliner, JD (Alliance for Green Heat)
Drury, Easan (NREL)
Farese, Philip (NREL)
Friedrichs, Mark (DOE EERE)
Garg, Rishi (Office of the People's Counsel-DC)
Gruenspecht, Howard (EIA) Harris, Jeff (ASE)
Harvey, Stephen (EIA OES)
Henry, Dave (DOC)
Holtberg, Paul (EIA OEA)
Kaarsberg, Tina (DOE EERE)
Kelso, Jordan (D&R International)
Laitner, Skip (ACEEE)
Larsen, John (DOE PI)
Leifman, Michael (GE)
Lewis, Katie (EIA OES)
Lu, Ruey-Pyng (EIA OES)
Majersik, Cliff (IMT)
Margolis, Robert (NREL)
Marnay, Chris (LBNL)
Mayclin, Danielle (EIA OES)
Mayes, Fred (EIA OEA)
McDonald, Sean (PNNL)

McNary, William (EIA OES)
Michaels, Joelle (EIA OES)
Mignone, Bryan NMN (DOE PI)
Neff, Shirley (EIA)
Neubauer, Max (ACEEE)
Nicholls, Andrew (PNNL)
Niebling, Charles (Alliance for Green Heat)
Nordman, Bruce (LBNL)
O'Brien, Eileen (EIA OES)
Olsen, Jay (EIA OES)
Pearson, Gina (EIA)
Ramea, Kalai (UC Davis)
Rosenquist, Gregory J. (LBNL)
Sachs, Harvey (ACEEE)
Steinberg, Daniel (NREL)
Stellberg, Sarah (IMT)
Stokes, Kem (DOC)
Swenson, Alan (EIA OES)
Taylor, Cody nmn (DOE EERE)
Ulrey, Peri (NGSA)
Utzman-O'Neill, Diane (HHT)
Wang, Joy (Georgia Tech)
Wang, Yu (Georgia Tech) Wisser, Ryan (LBNL)
Wood, Frances (On Location)
Xiaojing, Sun (Georgia Tech)
Yeh, Sonia (UC Davis)