Buildings Technology Research and Development Subcommittee Meeting

March 5, 2010

Location: 950 L'Enfant Plaza DOE
Time: 1:00-3:00 p.m.

Attendees[1]	**Agency/Office**	
Shyam Sunder (telephone)	DOC/NIST	BTRD Co-chair
Roland Risser	DOE/EE-Buildings	BTRD Co-chair
Kevin Hurst	EOP/OSTP	
Paul Domich	DOC/NIST	BTRD Ex-Sec
Brian Holuj	DOE/EE-Buildings	
Alan Schroeder	DOE/EE-Buildings	
Joe Hagerman	DOE/EE-Buildings	
Jean Boulin	DOE/EE-Buildings	
Sean McDonald	PNL	
Dale Manty	EPA	
Joni Tetter (telephone)	EPA/GSA	
Ken Sandler	EPA	
William Grosshandler	NIST	
Bob Kollm	USPS	
Diane Stewart	HHS	
Kurt Knight	VA	
Sarah Ryker (telephone)	STPI	
Stephanie Shipp (telephone)	STPI	
Matt Gray	DOE/FEMP	
Ilker Adiguzel	USACE	
Martin Savoie	USACE	

Next Meeting: March 25, 2010 1:00 - 3:00 PM, 950 L'Enfant Plaza DOE

Meeting Calendar:

March 25, 2010
April 15, 2010
May 20, 2010
June 17, 2010
July 15, 2010
August 19, 2010
September 16, 2010
October 21, 2010
November 18, 2010
December 16, 2010

Review of Minutes: Informal review of Minutes for November 19, 2009 was performed prior to the start of the meeting.

[1] Active Members not attending identified in light gray

Introductions: Subcommittee Executive Secretary Paul Domich, on behalf of the Subcommittee Co-chairs, opened the monthly meeting of the Subcommittee for Buildings Technology Research and Development (BTRD) welcoming the agency representatives and thanking them for their participation. Participants provided self-introductions.

Welcome: Co-chair Shyam Sunder (NIST) provided an introduction for Roland Risser (DOE) who has assumed the role of Subcommittee Co-chair representing the Department of Energy. Risser provided the Subcommittee members with a brief summary of his professional career prior to joining DOE two months ago and assuming the role of Director of the DOE Building Technology Program. Roland Risser previously was the Director for Customer Energy Efficiency at Pacific Gas and Electric Company, one of the largest natural gas and electric utilities in the United States. Mr. Risser was responsible for managing PG&E's energy efficiency, low income, emerging technologies and demand response programs, which have an annual budget of almost $500 million per year. Risser has over 30 years experience in the energy field.

Risser's goals for the Building Technology Program are to increase the speed by which the Building Technology Program executes its research strategy, enhance the implementation of research and development outcomes and the energy and conservation strategies focused on building technologies. Emphasis will be placed on accelerating activities in the building codes and appliance standards programs. The program will aggressively pursue regulatory options that are available to improve energy-related compliance rates. In addition, the Buildings Program will increase its focus on implementing efficiency measures in existing buildings as it continues to work on technologies for the new construction market. A more detailed and cross functional multi-year plan will be developed to guide the programs and activities in DOE's Building Technology Program.

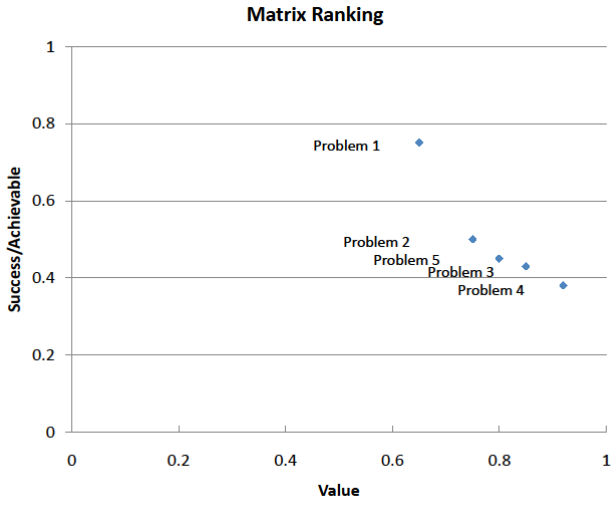
BTRD Subcommittee 2010 Goals and Objectives: Shyam Sunder provided an overview of several discussions with Aneesh Chopra, Chief Technology Officer & Associate Director for Technology (OSTP) on the Subcommittee's activities in 2010. Independently, Risser and Sunder met with Chopra and Kevin Hurst (OSTP) to discuss both departmental and subcommittee activities related to building energy programs and activities. Chopra, as the Co-chair to the NSTC Committee on Technology, has encouraged the co-chairs and the Subcommittee to identify a significant challenge focused within the subcommittee's charter and to embark on a path forward that will provide results in 12-18 months. Chopra emphasized that energy, energy conservation, and the improved performance of buildings are all presidential priorities. Subsequent to the meetings, Chopra provided a memorandum to the Co-chairs that contain suggestions and strategies for the Subcommittee in identifying the challenge and moving forward to overcome the challenge (distributed previously).

Subcommittee discussion on these directives ensued. Risser engaged the subcommittee members in brainstorming the challenges faced by the federal government and the nation in improving the performance of buildings. The Subcommittee provided a range of ideas which were then reduced and condensed to the following five problems affecting the performance of buildings:

1. Building tenants/residents/owners/managers cannot access real-time data for their energy usage nor their impacts on water consumption
2. There are no adequate, standardized, and generally recognized methodologies and data for supporting a comprehensive (cost/economic, health, environmental, societal) lifecycle analysis (LCA) for buildings technologies
3. There is a lack of recognized transformative business models for implementing the widespread dissemination and adoption of sustainable buildings technologies
4. Many State and local governments have not adopted, nor are enforcing, up-to-date building codes, standards, and best practices.
5. There is no compelling business case for net-zero energy buildings developed that has been presented to the marketplace

With five initial candidate problems identified, the subcommittee members where then asked to provide a numerical weight for the “value” associated with overcoming the problem, and a measure of the difficulty or “achievability” in overcoming the problem. A summary of the consensus opinion of the subcommittee members follows.

	Value	Achievable
Problem 1	0.65	0.75
Problem 2	0.75	0.5
Problem 3	0.85	0.43
Problem 4	0.92	0.38
Problem 5	0.8	0.45



Action Item: Paul Domich will summarize the problem statements, and develop draft descriptions of the scope and the subcommittee's possible role in each area.

Action Item: Subcommittee members will be asked to review the problem statement and scope for accuracy and appropriateness, and identify any additional roles for the Subcommittee in addressing the problem. Modifications to the numerical weights for each problem annotated. This material will be discussed at our March 25th meeting.

White House Summit on Net-Zero Energy, High-Performance Green Buildings: Paul Domich (EPA) and Dale Manty (EPA) provided an overview of the current status of a spring workshop for federal high-performance green buildings organized by the Subcommittee. Currently, a number of federal groups have indicated interest in cosponsoring the workshop. The cosponsors now include:

- Federal Facilities Council
- GSA Office of Federal High-Performance Green Buildings
- DOE Commercial Buildings Program
- DOE Federal Energy Management Program
- Federal Interagency Sustainability Working Group/FEMP
- Council on Environmental Quality (EOP Lead-sponsor)

GSA has contracted with the National Academy of Science to facilitate and document the outcomes from the workshop. Lynda Stanley (NAS) is leading the effort with GSA.

The date for the workshop must be changed due to scheduling conflicts. The new dates will be June 17th and 18th. The primary workshop activities will occur on the 17th, with subcommittee organizers, the NAS Expert Panel members, and other invited participants meeting on the 18th to summarize the workshop activities and to develop path forward. NAS will identify an Expert Panel to help formulate the focus for the workshops and to identify the key issues. The NAS, working with the Expert Panel, following a second workshop, will develop a report based on the conclusions identified and publish approximately 500 copies of the workshop report.

Action Item: Subcommittee members are tasked with identifying potential conflicts with the new date. Lynda Stanley will be contacting the speakers for the summit and providing final copies of the agenda.

Discussion on ARRA Activities: The discussion item was postponed until the March 25th meeting.

Closure: Domich, on behalf of the Subcommittee Co-chairs closed the meeting at 3:00 p.m. and thanked the agency representatives for their participation.