

**Meeting of  
Association State Energy and Technology Transfer Institutions**

**The Madison Hotel  
Washington D.C.  
February 9-10, 1998**

The following persons were present:

Larry Ambs, Massachusetts CEERE  
Floyd Barwig, Iowa Energy Office  
Jon Biemer, Bonneville Power Administration  
Morton Blatt, Electric Power Research Institute  
David Block, FSEC  
Marilyn Brown, Oak Ridge National Laboratory  
Jeff Christian, Oak Ridge National Laboratory  
Jim Cole, California Institute for Energy Efficiency  
Michael DeAngelis, California Energy Commission  
Lou Divone, U.S. Department of Energy  
Peter Dreyfuss, U.S. Department of Energy  
Denise Evans, Missouri Environmental Improvement & Energy Research Authority  
Mark Ginsberg, U.S. Department of Energy  
Kristi Growdon, Washington State University  
Rich Hackner, Energy Center of Wisconsin  
Mark Hanson, Energy Center of Wisconsin  
Allan Hoffman, U.S. Department of Energy  
Dave Hewitt, NEEP  
Dave Jones, U.S. Department of Energy  
Bob Koger, Advanced Energy Corporation  
Marvin Lieberman, EPRI  
Vicki Mastaitis, Interstate Renewable Energy Council  
Parker Mathusa, NYSERDA  
Andre Otto, Department of Minerals & Energy, South Africa  
Graham Parker, Pacific Northwest National Laboratory  
Jim Peerenboorn, Argonne National Laboratory  
John Reese, U.S. Department of Energy  
Bob Rose, U.S. Environmental Protection Agency  
Art Rosenfeld, U.S. Department of Energy  
John Ruckes, State of Connecticut, Office of Policy Management  
Tony Schaffhauser, Oak Ridge National Laboratory  
Ron Shelton', Oak Ridge National Laboratory  
Carol Tombari, National Renewable Energy Laboratory  
Vestil Tutterow, Lawrence Berkeley National Laboratory  
Bill Valentino, NYSERDA  
Gunnar Walmet, NYSERDA  
Jack White, UTECH, Inc.  
Dan York, Energy Center of Wisconsin

**Monday, February 9, 1998**

**ASERTTI/NASEO Research & Development Committee**

▪ **Energy R&D and Restructuring**

Floyd Barwig, Iowa Energy Center discussed Iowa's public purpose R&D Restructuring. Currently research money is decreasing. The Iowa Utility Board has an ongoing inquiry into the electric restructuring, and is not sure if competition will be beneficial. Research in this area has indicated:

1. Most consumers do not realize that restructuring of the electric industry may be in their future.
2. Investor owned taxes, will replace property tax with Kwh charge
3. Public benefits do not appear to be an issue at this time and has not been addressed.

Patrick Meier, Wisconsin Department of Administration-Wisconsin Energy Bureau discussed the Public Service Commission of Wisconsin's Public Benefits Proposal for low income programs, energy efficiency initiatives, and R&D. There has been 166M identified for these efforts.

A number of states are starting new research on public knowledge of restructuring. There is still room for additional participation (funding) from additional states (approximately 10). Washington State University is the primary contractor on the project. States that are currently involved in the study are, Indiana, Missouri, Wisconsin, and Iowa.

▪ **ESCO Market Research**

Mark Hanson, Energy Center of Wisconsin, described a research effort to understand Energy Service Company (ESCO) activity and impact in Wisconsin and in the national marketplace. The research is just being initiated and other states can join this study. See Mark for details.

▪ **California Experience**

Michael DeAngelis, California Energy Commission (CEC) discussed the three public programs currently in California.

1. Energy Efficiency
2. Renewables: Renewables current funds are \$540M, 45% existing programs, 30% new technology, 10% emerging technology, 14% customer credit, 1% customer information (starting 9/98)
3. Public Interest Survey: The CEC Public Interest Energy Research (PIER) Program will invest up to \$61 M per year for four years to advance public interest energy research. The mission of PIER is to improve the quality of life for Californians by providing environmentally sound, safe, reliable, and

affordable energy services and products. The key subject areas of PIER are energy efficiency, renewables, fuel cells, environmental research, and strategic energy research. There are 6 planned solicitations planned throughout the year to seek out proposals for funding. The first solicitation was released for the time period on 8/97-2/98 and has resulted in 39 projects, from all key subject areas with a total budget of \$17M.

Jim Cole, California Institute for Energy Efficiency discussed recent decisions regarding Public Benefits R&D in California. Utilities will not be facilitators. Programs will be implemented through competitive solicitation.

- **Massachusetts Experience**

Pat Stanton, Commonwealth of Massachusetts, Division of Energy Resources discussed restructuring as "retail access" i.e. truth in advertising. Massachusetts is accomplishing this in various ways.

1. Renewables: Portfolio with ongoing increase through 2003 and an energy trust fund.
2. Energy Efficiency, a continuation of traditional DSM through distribution companies.
3. Low income and consumer education issues appear to have a minimal voice in the market place.

- **ASERTTI Meeting**

**Opening Remarks**

1. Mark Hanson, Chair of ASERTTI, opened the meeting. Kathleen Hogan from the Environmental Protection Agency will join the membership for dinner this evening, as Dan Reicher is unable to attend. Dinner will be held at the Cosmos Club.

**Commercial and Residential Buildings Initiatives**

1. Mark Ginsberg, U.S. Department of Energy (DOE) and John Reese, U.S.DOE discussed OBTS Strategic Plan. OBTS is 10 months into this combined effort with Building Technology and Office of Financial and Technical Assistance. The draft plan went out to over 200 organizations. Comments have been received from about 50 of those organizations. Comments on the draft had some basic themes.
  - a. Poor/more details on overall strategy and not an implementation plan
  - b. do a better job combining the pieces of the plan and addressing the plan
  - c. incorporate renewables
  - d. identify logistical barriers regarding renewables in building components,
  - e. look at a systematic approach
  - f. increase peer review

- g. increase of external participation
  - h. and create strategic plan to best provide services
2. Dan York, Energy Center of Wisconsin provided a status report on the ASERTTI Commissioning project. ASERTTI received a \$50K grant from the U.S. DOE for commissioning of new and existing building training. Commissioning practice is at various stages throughout the country but the training materials can be used throughout the U.S. The timeline for this project is for the one day overview workshop to be developed by late summer. The training will cover both new and existing buildings.
  3. Gunnar Walmet, NYSERDA discussed lighting controls workshop held 12/97. The workshop membership was an unprecedented mixture of participants including lighting manufacturers, technical groups, LBL, Lighting Research Center, EPA, DOE and ASERTTI. Some consensus from the group was reached in the areas of controls and energy efficiency. The next step in this area is to have ASERTTI become involved. *Follow up report was requested for the next ASERTTI meeting, and for commissioning research for lighting.*
  4. Mark Hanson, Energy Center of Wisconsin (ECW) discussed the Green Building efforts in Wisconsin. A residence hall in Ashland, Wisconsin (Northland College) is under construction and will be completed by the fall semester 1998. The workshop held in conjunction with this project was a sold out event. At the University Research Park area in Madison an office building is planned with a cost of \$50-60 per square foot excluding build out.
  5. Bob Rose, U.S. Environmental Protection Agency discussed the Energy Star label for buildings. This national benchmark is market driven and was initially developed for office buildings. Energy Star buildings will be listed on the internet site ([www.enemystar.gov](http://www.enemystar.gov)). U.S. EPA is working on the strategy for launching the label.

### **Industrial and Transportation Initiatives**

1. Lou Divone, DOE, Office of Industrial Technologies (OIT) discussed the OIT directions and coordination with state level R&D organizations. He reviewed FY99 budgets and directions. DOE is seeking recommendations how ASERTTI and OIT can work together, set priorities of states and work with vision teams at OIT. With collaboration, R&D costs can be shared. Contact Marilyn Burgess at OIT for copies of state data sheet.
2. Gunnar Walmet, NYSERDA informed the membership of ASERTTI's Industrial activities. Currently on an ad hoc basis NYSERDAI and the DOE are discussing activities supporting compressed air. In the area of Mini Industries of the future, both formal and informal discussion have taken place, and a challenge has been identified regarding competing interests between the groups i.e. ceramic and metal workers. The Superconducting area recently won an award from DOE. Most ASERTTI members have interest in the area of agriculture and there are plans to pool common interest on a wide range of topics i.e. farming, food processing. *Walmet will follow up via bulletin board discussion regarding the Agricultural interest*

3. Vestal Tutterrow, Lawrence Berkeley National Laboratory described the Compressed Air Systems Challenge, a National Partnership for more effective, efficient, and reliable industrial compressed air systems. The Challenge has been organized as a two year project with the ECW serving as project manager and funds administrator. All stakeholders are being encouraged to participate in the development of materials. Stakeholders include: large users of compressed air systems, compressed air system consultants and their associations, manufacturers and distributors, ASERTTI, US DOE Motor Challenge, Association for Facilities Engineering, and utility companies and utility consortia. For further information on the Compressed Air Challenge contact Karen Meadows, Energy Center of Wisconsin.
4. Bob Koger, Advanced Energy Corporation (AEC) discussed new legislation went into effect on 8/25/97 regarding EPAC motors. Motor manufacturers will be given two years to comply with the new legislation. AEC tested 20 different motors, similar to a Consumer's Report test, to see if manufacturers were accurately reporting their motor performance. The results will be published in the near future. Additionally, AEC's project on Proven Excellence in Motor Repair Shops has been successful to date. The goal of this project is to certify 10% of EASA shops within 3 years. Currently there are 55 qualified leads in 29 states. AEC also has an opportunity for training organizations that are interested in conducting onsite inspections and marketing programs to get involved with this recurring yearly program.
5. Kristi Growdon, Washington State University, Cooperative Extension Energy Program updated the membership on a new project, Motor Master Plus software. This is a collaborative effort with Inpro. Information is downloaded from various manufacturers. Current motor manufacturers are interested in the availability of this information and advancements. WSU is currently looking for various experts i.e. debuggers, programmers etc. to assist in this effort.
6. Parker Mathusa, NYSERDA, briefed the membership on Transportation activities. There are currently two parallel tracks, one involving ASERTTI and DOE and secondly a continuing dialog with the Department of Transportation.

**Tuesday, February 10, 1998**

### **Federal Energy R&D for the Challenges of the 21<sup>st</sup> Century**

A presentation was made by Samuel F. Baldwin, Study Executive Director, of the President's Committee of Advisors on Science and Technology (PCAST), Energy R&D Panel. Research and Development is the launching point of this study and recommendations identify national challenges and R&D strategies. Conclusions of this study include:

1. Large potential for energy efficiency
2. Energy efficiency is cost effective over all sectors
3. Within the building sector, R&D on equipment is needed
4. Efficient micro turbines are an important R&D focus in their industrial sector
5. Transportation sector should extend fuel efficiency to 80 miles per gallon by 2004

Proposal R&D funding increases from \$373M in FY97 to \$880M in FY03.

### **President's Commission on Critical Infrastructure Protection**

David Jones, DOE Infrastructure Assurance Coordinator discussed the Commission's findings.

Key trends are:

- Electric power and natural gas restructuring
- Significant increase in use of natural gas
- Oil Industry is showing lower profit margins and downsizing
- High dependence on information

The preliminary recommendations are:

- Enhance information sharing
- Develop processes to protect sensitive private sector information shared with government
- Industry and government should develop "best practices"
- Develop testbed/pilot projects to demonstrate infrastructure assurance program
- Industry recommendations to include:
  - Establish national standards for "one-call" program
  - Review/revise existing regulations on excessive reporting of sensitive information
  - Allow military/national guard use in time of war or credible terrorist threat
  - Form a joint center (government/industry) for sharing threat and vulnerability information
  - A joint effort with industry and government is needed to analyze cyber threats and develop countermeasures

Copy of transparencies is available upon request. For copy of full report see website at [www.pccip.gov](http://www.pccip.gov)

### **Implications of Climate Change on Energy R&D**

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1. Allan Hoffamn, Acting Deputy Assistant Secretary, Office of Utility Technologies (OUT) presented OUT's Renewable Directions. The mission of this effort is to lead the national effort to develop renewable and enabling energy technologies and promote their acceptance and use, nationally and internationally. The key change in 1999 is an increase in budgets a direct result of global change. Copy of transparencies is available upon request.
2. Howard Geller, ACEEE discussed Meeting U.S. Climate Change Commitments. The Climate Change Technology Initiative is a three-stage approach in addressing climate change. The first stage consists of actions to stimulate development and use of technologies to reduce greenhouse gas emissions. The second stage is designed to review options and detail plans for a market-based permit trading system for carbon emissions. The third stage will implement a market-based emissions-trading system. A copy of detailed 1999 Budget Briefing Materials is available upon request.
3. Howard Geller also informed the membership of ACEEE's Consumer Guide to Home Energy Savings, Guide to Energy Efficient Commercial Equipment, and the Green Guide to Cars and Trucks. These publications are available directly from ACEEE.
4. Peter Dreyfus, DOE, updated the membership on the Million Solar Roofs project. The EPA has responded to the initiative positively and the Department of Defense is contracting for solar roofs on 1000's of rooftops by 2000. On the state level, local communities are the key to having the initiative work. Peter Dreyfus is willing to work with the states and local communities to advance the initiative.
5. Jeff Christen, Oak Ridge National Laboratory is willing to assist in facilitation of contacting National Roofing Contractors. *It was recommended that state buildings have solar power and establish 800 lines to answer questions regarding solar power and the initiative.* For further details see the website [www.millionsolarroofs.org](http://www.millionsolarroofs.org)

### **ASERTTI Directions for 1998**

1. New Initiatives for consideration were described, including: a. National Fuel Cell research center at Irvine. Fuel Cell manufacturers involvement would allow for beta test of the product, and allow potential customers to see the technology at work. Kick off is scheduled for 2/25/98. b. K- 12 Energy Education Program (KEEP) is a collaborative effort in energy curriculum at the Energy Center of Wisconsin. c. Training in the international area - Hotels are interested in the area of renewables and 'greening' their buildings
2. Key Relationship Management (KRM) is beginning to make significant progress in working with DOE, EPA etc. There is still a need to identify ways in which ASERTTI members share information from their multiple contracts. Jim Cole will take over as liaison for Mark Hanson in this area.
3. ASERTTI membership voted to continue the support UTECH in supporting R&D coordination and KRM activities for the next year.

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