

**State Energy Advisory Board Meeting
October 16-18, 2007
Washington, D.C.**

BOARD MEMBERS PRESENT

Chris Benson (Chairman) (AR), Patricia Sobrero (Vice-Chair) (VA), Elliot Jacobson (Secretary) (MA), JamesEtta Reed (PA), Janet Streff (MN), Duane Hauck (ND), Peter Johnston (AZ), John Davies (KY), William “Dub” Taylor (TX), Alexander Mack (FL), Jim Ploger (KS), Jim Nolan (MT), Susan Brown (WI), Elizabeth Robertson (GA), David Terry (VA), and Steven Vincent (OR).

Others present were:

Gary Burch, STEAB Designated Federal Officer (DFO).

Pat Malone, TMS, Inc.

David Rathbun, TMS, Inc.

The following STEAB members were absent:

Henry “Ted” Berglund (FL), Paul Gutierrez (NM), Daniel Zaweski (NY), and Robert Hoppie (ID).

WELCOMING & INTRODUCTIONS

Chris Benson opened the meeting with brief introductions, allowing each Board member to introduce themselves and provide a brief summary of the current energy focus of his or her respective State. He then summarized the meeting’s agenda, highlighting the list of presenters.

Chris Benson then paused to recognize Ms. Elizabeth Robertson (GA) for her service to the STEAB, explaining that this will be her last meeting as she will be retiring from her position at the Georgia Environmental Facilities Authority (GEFA) later this year.

DISCUSSION WITH MR. DAVID RODGERS, DEPUTY ASSISTANT SECRETARY FOR ENERGY EFFICIENCY, AND MR. STEVEN CHALK, DEPUTY ASSISTANT SECRETARY FOR RENEWABLE ENERGY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY (EERE)

Gary Burch began this discussion segment by recognizing how beneficial Mr. Rodgers has been at past meetings in terms of keeping the Board up-to-date with EERE focuses and priorities. He explained that EERE recently decided to split the duties of the Deputy Assistant Secretary for Technology Development (DASTD) within EERE, creating two new positions: The Deputy Assistant Secretary for Energy Efficiency (DASEE, Mr. David Rodgers), and the Deputy Assistant Secretary for Renewable Energy (DASRE, Mr. Steven Chalk). He then commented that since the two new Deputy Assistant Secretary positions within EERE’s Office of Technology Development (TD) are responsible for sharing the duties of managing the organization’s 10 different program offices, that it would be advantageous for the Board to hold discussions with both DASs as it will assist the STEAB in gaining a much wider perspective of how they can better assist EERE.

Mr. Chalk thanked the Board for inviting him to the meeting and briefly summarized his respective career with EERE. He then discussed the fore mentioned organizational shift, explaining that the new split-duties of the DAS position allow him and Mr. Rodgers to work together as one organizational entity. He then explained that “energy efficiency” needs to come first, noting that its general practice by industry and the public are paramount in order for America to strengthen its overall energy security and environmental quality. Mr. Chalk then discussed EERE’s “renewable energy” focuses, highlighting several topic areas that the EERE would like to address/achieve in the near future:

- Renewable Energy Credit Systems (RECs): EERE is seeking to integrate RECs on a wider scale, perhaps assigning a “Federal broker” to oversee continued growth and record successes and/or failures.
- Bringing Renewables to the “Next Level”: EERE wants to explore how it can overcome the “hurdles” that stymie increased renewable energy production, particularly financing. Current renewable energy power plants – namely wind farms – struggle to achieve 100 megawatt (MW) levels. In the near future, EERE wants to achieve the “gigawatt (GW) level.”
- Geothermal Energy: The EERE Geothermal Energy Technologies Program is in hiatus and its funding has been significantly “ramped down” over the past few years. A report was released earlier this year by the Massachusetts Institute of Technology (MIT) that strongly advocates the expansion of geothermal energy production, and EERE is examining the report to see if there is any information within that may provide EERE with new methods or ideas for how the DOE can “re-invigorate” the program.
- Wind Energy: EERE is looking to issue a report on its Wind program in a few weeks time. The President’s Advanced Energy Initiative calls for increased wind energy usage. Several other countries have already achieved 20 percent wind power, and that the Department realizes that it will need to significantly expand wind energy to meet its future goals. DOE wants to see wind energy expand from its current national total of 12 GW to 200-300 GWs in the next 25 years.

Mr. Rodgers thanked the Board for inviting him to the meeting and also shared some of his visions for the future of EERE’s energy efficiency technology programs. He stated that in regards to the organization’s focus for the upcoming year, “to expect more of the same in 2008.” He explained that the Assistant Secretary for EERE (ASEE), Alexander A. Karsner, has personally looked at each TD Office in order to see how each Program can improve, at the same time allowing the organization to continue to maintain its respective research and development (R&D) activities while adding increased focus towards market adoption of current and emerging energy efficient technologies.

Mr. Rodgers discussed the following topic areas in terms of what EERE wants to accomplish in the future. EERE is looking for ways to promote energy efficiency through:

- Assisting the States with implementing more aggressive building code standards;
- Accelerating appliance standards and advanced lighting;
- Expanding EERE partnerships to demonstrate and promote zero and near zero-energy buildings in more high-profile settings;
- Addressing the growing need of energy efficiency in data centers;
- Increasing energy education; and
- Reintroducing “Energy Smart Schools” and “Rebuild America” programs.

Mr. Rodgers explained that continuous R&D will remain in the pipeline for building technologies as it is an essential function for increasing the public ethic towards the need for energy efficiency. He explained that the organization will continue to look for more opportunities to partner with public and private entities in order to reach out and help the public understand the importance of energy efficiency. EERE will be working with many partners to identify and help prepare energy-education materials.

In closing, Mr. Rogers explained that there are marks in House and the Senate that will likely provide EERE with more resources in the future, and that EERE “plans to hit-the-ground-running fast.” He did comment, however, that EERE is still operating under a continuing resolution (CR), and that the allocation and planning for any increased funds cannot begin at the present time.

Q+A Session:

Gary Burch inquired as to when EERE will be out from underneath the current CR. Mr. Rodgers explained that the CR should continue up until about mid-November, but added that he has no additional information as it is ultimately up to the Congress.

Peter Johnston inquired as to whether or not EERE is looking into producing bio-jet fuel. Mr. Chalk explained that the Air Force has had some interest in this area but EERE does not have a concentrated program. He did comment, however, that EERE is taking another look at bio-diesel productions to see if any additional possibilities may exist to advance and/or expand the current technology.

Alexander Mack brought up the subject of increased generation from renewables through education and outreach efforts, and inquired if the DOE has any plans to “ramp up” production. Mr. Chalk explained that the “Solar area” is just starting to look at that; the Hydrogen Program does have an educational effort in place, and in a few weeks time, is expected to put out solicitations geared toward developing University curriculums. He explained that increased education in energy efficiency and renewable energy is an area that he feels that EERE can “pick it up” a bit. David Rodgers stated that EERE is very interested in finding ways to increase energy education, and commented that the DOE has plenty of educational materials but no “agents” to distribute them.

Pat Sobrero inquired as to whether or not the organization is working with architects to develop more “attractive” near and zero-energy homes, suggesting that this may increase visibility and interest. Mr. Rodgers explained that these types of homes are starting to receive some additional visibility, and urged the Board to tour some of the energy efficient houses that are on display at the National Mall (Solar Decathlon Event).^{*} He explained that some of the designs are very innovative, commenting that zero-energy buildings have typically been so “cutting edge” that their designers usually do not stress looks. He added that there is one initiative that will soon be rolling out that is an “elevation” of the Solar Decathlon; its focus will be the “production building” environment, with hopes of attracting production builders to help build similar structures that are commercially viable, low-cost, and attractive.

John Davies commented on Mr. Rodger’s earlier discussion(s) regarding the DOE’s interest in reintroducing the “Energy Smart Schools” and “Rebuild America” programs, and stated that it is very reassuring to see that EERE is planning to take a more active approach towards energy efficiency and renewable energy education. He explained that the “Energy Smart Schools” program failed to make a large-scale splash, but stated that he feels the program can gain more traction if it were rolled out at the State level. Mr. Rodgers explained that since the major EERE-wide reorganization in 2002, it has been difficult to continuously keep States informed with everything going on at EERE. He also commented that similar programs have struggled because the Congress has yet to take a major interest in appropriating funding for public outreach efforts – it is a “tougher sell” on the Hill for significant appropriations and resources for outreach, education, and similar-scope grants. John Davies explained that education is crucial, commenting that from the consumer end, the public will only be concerned with whether or not products are energy efficient and of a high quality – not necessarily concerned with brand names.

David Terry stated that the organization that he represents, the Association of State Energy Research and Technology Transfer Institutions (ASERTTI), is developing a draft letter that applauds the DOE for taking a more

^{*} The Solar Decathlon is an annual event sponsored by the DOE that joins 20 college and university teams in a competition to design, build, and operate the most attractive and energy-efficient solar-powered houses.

aggressive stance in regard to promoting the Energy Star program and its products. He explained that DOE's approach of setting more advanced standards and product specifications will become drivers that will enhance energy efficiency. He then inquired as to whether or not EERE is considering adopting any suggestions that would add a new position within the organization to focus on State-specific issues and matters. Mr. Rodgers explained that for now, EERE is focusing on filling six Program Manager positions. Once EERE's internal management structure is established, EERE will be better equipped to approach the possibility of adding new positions that focus more on outreach.

Elliott Jacobson stated that he is concerned with the status of the Weatherization Assistance Program (WAP), and inquired as to whether or not the program will continue to receive the adequate amount of funding necessary for it to be successful. Mr. Rodgers explained that the WAP has received a lot of attention during the President's first term in office, and that EERE is committed to implementing the program as best as possible with the resources provided/received. He explained that in a recent article, 25 million homes nation-wide are currently eligible for funding, but that last year's funds were only able to "weatherize" 80,000 homes. He further explained that although the demand appears to be higher than the current funding, as far as energy savings are concerned, the WAP does not have the most favorable return on investment (ROI). "Lighting," he explained, provides for the best dollar-for-dollar ROI. Mr. Rodgers suggested that the program perhaps be re-evaluated or "re-invented" so that it can serve "more, better, faster." He explained that Mark Bailey, the Acting Program Manager for EERE's Office of the Weatherization and Intergovernmental Program (WIP), in conjunction with the National Governor's Association (NGA), is looking to put together some templates for "best practices" and wants to develop a folder that includes "options" and "evaluations" of how the WAP is tested and/or operated in the different States.

DISCUSSION WITH MICHAEL BRUCE, EERE SENIOR ADVISOR, OFFICE OF THE ASSISTANT SECRETARY FOR EERE, COMMERCIALIZATION AND DEPLOYMENT

Mr. Bruce thanked the Board for coming to Washington, DC and for inviting him to the meeting. He began his discussion by providing some background on his office. He explained that when the current ASEE came on board in March 2006, one of his first realizations was that the DOE was overly focused on the core competencies of R&D. He further explained that the ASEE noted that times have indeed changed, and that with the ever-growing concerns of climate change and escalating fuel prices, there should be a greater National focus towards energy efficiency. He believes that the best way to expand interest and awareness of current and emerging alternative energy technologies would be to bring in "business minded" individuals that would help to "bridge a gap" that connects the DOE to the private sector. He explained that there is a very broad perspective in terms of "financial realization" and "understanding," stating that "profitability is the key to sustainability" in terms of emerging technologies gaining a foothold in the marketplace – making projects more profitable will generate more consumer interest and "staying power."

Mr. Bruce identified three key subject areas in which EERE Commercialization and Deployment team can "move the needle forward" before the current administration leaves office:

1. Technology Commercialization – Crossing the "Valley of Death" (VOD):

- Scientists around the U.S. are doing great research but they are not businessmen – unaware of how to move technologies into the market place.
- Human Capital Formulation: Constructing a bridge over the VOD by soliciting assistance from venture capitalists and the private sector to increase funding on emerging technologies. A market needs to be created for technologies to flourish – the need exists for a team that can develop and execute a business plan.

- “Capital Bridge”: The DOE funds the research taking place at the National Labs, but emerging technologies continue to receive low visibility as many of the technologies stay within the Labs because prototypes are never built. The VOD is not just unique to the National Labs and exists everywhere that scientific research takes place. Spending money into the VOD can help bridge the gap, and the DOE is looking to develop a 7.5 million dollar “technology, commercialization and deployment fund.”

2. Capital Formulation:

- Loan Guarantees: There are numerous technologies ready to be deployed but there has been difficulty pulling capital together for the first stages. Biorefinery grants and Loan Guarantees may be one method that accomplishes this – the challenge lies in the administering of services within a Federal agency.
- The U.S. has prioritized exports but has not had the same prioritization for “clean energy.” The U.S. will need roughly 35 billion dollars annually over the next 10 to 20 years to reach some of the President’s goals listed in the Advanced Energy and Twenty-in-Ten initiatives – the administration currently generates about 6 billion. Debt markets should also be engaged as potential investors in addition to venture capitalists

3. Deployment:

- EERE is working with the Department of the Interior (DOI) to develop “Green Energy” programs within the National Parks, and will begin to try to deploy alternative fuel vehicles with the National Park Service.
- Freedom Prize Initiative: The Department is looking at developing incentives for communities that deploy new technologies than lessen the Nation’s dependence on foreign sources of oil. Cities that achieve goals will be rewarded for solving problems. This will mark the first time that the DOE has initiated an incentive-based prize along this scope – 5 million dollar prizes are likely to be the allotments for each respective award.
- Reduced National Workforce: According to the most recent National Petroleum Council Report, 50 percent of the Nation’s workforce will be eligible for retirement within the next 10 years. This statistic has the ability to cause bottlenecks in the area of “human capital.” States and University systems will be an area of focus for training the next generation of energy conscious citizens that can bring more talent and fresh ideas forward – a continuous awareness of energy sciences into the next generation.

Q+A Session:

Peter Johnston said that the EERE Commercialization and Deployment effort appears to be a very “dynamic operation.” He also stated that he recently learned that the Secretary of Energy has appointed Mr. Ray Orbach as the agency’s “Technology Transfer Coordinator.” Michael Bruce stated that there is a lot of overlap between technology transfer and commercialization. He also explained that under the current DOE structure, it is the DOE’s Office of Science that controls the majority of the National Laboratories. EERE, by definition, is doing applied research; however, his office is also working with the Technology Transfer Department to share and generate new ideas. He explained that EERE currently has a catalog that lists all of the near and market-ready technologies being developed within each EERE R&D program office.

Steve Vincent brought up the topic of industry manufacturing R&D, and inquired if their gaining access to National Laboratory R&D would assist in pushing sciences and technologies forward. Mr. Bruce said that he believes it would do just that, as there are a lot of great technologies not only being developed in

the labs, but several are currently on “laboratory shelves.” He stated that one problem that he has seen is that the DOE’s roots have always been very secure ones as the agency was born in the years following the Manhattan Project. He explained that due to security measures, many large companies and conglomerates have not been able to visit and/or view many of the technologies that reside within the National Labs. In the past, DOE has held the intellectual property rights for many projects and investments. And as a result, these technologies have remained on the shelves. Now, companies developing new technologies are permitted to keep the property rights – the contractor will generally own the title(s) to the intellectual properties, with royalties going back into the Labs. The mitigation that exists in performance contracting that allows contractors a percentage of the royalties is something that the Congress would have to address.

Chris Benson inquired as to how the States may intersect with EERE’s Commercialization Deployment team. He explained that the States vary in terms of resources and opportunities, and also tend to center around economic development and environmental issues. And although the private sector can be a very competitive alternative for introducing opportunities, the States are also very proactive in soliciting the opportunities that will flourish within their respective municipalities. He further commented that the Board could serve as good “front people” for the Commercialization and Deployment team to relay opportunities and information at the State level. Mr. Bruce replied that on a “commercialization” front, the sharing of information will assist in bringing these great technologies and ideas out into the open, and that sharing information from the Federal-to-State level is very important.

In closing, Mr. Bruce explained that the current make up of the EERE Commercialization and Deployment team is that of political appointees, and that its representatives would move on when the administration does. He did, however, express the fact that EERE is looking to create some special Senior Executive Service (SES) positions that would serve in “Board roles” so that their work can hopefully continue into the next administration. He stated that there has been some discussion in terms of making a permanent “Office of Commercialization and Deployment,” and encouraged the Board to discuss any potential recommendations on the matter. Gary Burch thanked Mr. Bruce for coming to the meeting. He explained that much of the Board’s current focus is geared towards communication, outreach, and assisting the National Labs with gaining more exposure in terms of their applied research and their respective energy efficiency and renewable energy technology portfolios. Gary Burch stated that he feels very strongly that the Board’s priorities are very much in sync with what the EERE Commercialization and Deployment team is doing, and invited Mr. Bruce to keep the Board abreast of any new activities in the future.

DISCUSSION WITH MARK BAILEY, ACTING PROGRAM MANAGER, EERE’S OFFICE OF WEATHERIZATION AND INTERGOVERNMENTAL PROGRAM (WIP)

Mr. Bailey thanked the Board for inviting him to the meeting. He explained that during the past year, the organization experienced a “plus up” due to the additional funds that were allocated to EERE under the CR. Additional funding was provided to the WAP; however, the majority of the additional funding went towards what the Congress deemed as “higher priority” areas. The following is a summary of the open discussion that Mr. Bailey facilitated:

National Action Plan for Energy Efficiency (NAPEE):

EERE is focused on identifying methods for how the NAPEE can be embraced on a national scale. In particular, what “energy efficiency” can do to offset the need for new fossil energy (FE) generation plants. He explained that EERE wants to work with “decision-maker groups” to affect policy and raise awareness of the benefits of “efficiency,” stating that there is currently a joint-effort between the Environmental Protection Agency (EPA) and the DOE to do just that. He stated that the NAPEE suggests that opportunities for energy efficiency are likely to continue to be available at lower costs in the future,

and that energy efficiency could yield more than 20 percent savings in total electricity demand nationwide by 2025. He stated that this is a challenge as much as it is an opportunity. And to achieve this, the NAPEE suggests that the DOE attempt to “ramp up” energy-savings performance contracts with State and local governments. In addition, developing a “host of efforts” with States and private industry to “ramp up” energy efficiency education and training; universities and hospitals are examples of some of the entities that the Federal Energy Management Program (FEMP) is attempting to enter into similar types of contracts. Renewable energy certificates are also a priority – working to identify the benefits of renewable energy production and usage beyond “air quality” and “environment.” The development of board coalitions between the States may improve and/or tackle the problem of inter-state trading (energy credit trading, etc.).

State Energy Program (SEP):

Mr. Bailey explained that the ASEE has challenged the WIP to look at the SEP as a core part of the States’ agenda. Building codes are a critical component for setting energy efficiency standards. The SEP is the only program that cross-cuts all market sectors and can promote the technologies that EERE develops. He explained that future marks could be in the neighborhood of \$35 million for SEP formula grants for the SEP. One focus is to find a way to address States’ needs through promoting the “teaming up” of States who share a similar geographic and have common issues/concerns – States working together to receive grants. In conclusion, he welcomed the STEAB to think on what components the States may find important in the competitive grant environment – what are the critical principles and drivers.

Weatherization Assistance Program (WAP):

Mr. Bailey explained that the WIP is challenging themselves internally to look at not only what they are doing to improve upon the WAP’s current \$1-to-\$1.53 ROI, but to see if that number can approach “\$3, \$4, or even \$5 per \$1 ROI.” He explained that there is much innovation within the States, and wants to look for ways for the program to replicate, as a whole, the types of successes that the Program has seen at the State level. However, on-going budget issues with the WAP have been constant. The WAP has a large base of support, and the amount of utility leveraged does “speak to the value that the program brings to the table.”

Gary Burch inquired if the ASEE is looking for ways to innovate the WAP, perhaps seeking additional funding for the program. Mr. Bailey said that the ongoing challenge for the WAP has been to look at alternative ways of doing more efficient business. He explained that the largest barrier has been the program’s decreased funding. Elliott Jacobson stated that people in the “Weatherization community” are proud of the work that has been done, and are always open to discussing new approaches or ideas but are less receptive when budgets are being cut. He further explained that when the “Weatherization community” hears that large cuts are coming, less information is exchanged and there is a greater reluctance to listen to new methods or ideas. Mr. Bailey stated that he understands the view points of the “Weatherization community” and realizes the “distractions” that budget numbers can cause when they are not supporting current baselines. He explained that he would “like to carry the facts forward.” He believes that there are some “connections” in which the WAP can help other initiatives, and that the WIP needs to be able to show how the WAP can serve as a linkage to other market transformation activities that EERE is trying to implement.

Sue Brown stated that Wisconsin has been implementing the Weatherization program along the same line as “targeted home performance,” and inquired if EERE has any plans to use the WAP as a “deployment arm” for other programs. Mr. Bailey said that one thing that EERE is working towards is the development of “weatherization blitzes” – community-wide programs that offer wider exposure. He explained that the city of Houston, TX has recently been approached and is being considered for similar, future activities. He continued by stating that EERE wants to create a better analysis model that identifies

how and where the States are meeting – or not meeting – their needs in terms of energy efficiency, thereby better measuring success. Elliott Jacobson explained that there must be some room left for failure, and that EERE should find a way to allow States to inform the DOE as to what doesn't work without fear of being penalized.

PRESENTATIONS[†]

The Board listened to presentations on the following topics:

- Annual Federal Advisory Committee Act (FACA) Ethics Briefing: Christina Hymer, Attorney-Advisor, Assistant General Counsel for General Law.[‡]
- Cooperative Extension Service and Energy Education: Dr. James Wade, Director, Extension and Outreach, National Association of State Universities and Land Grant Colleges (NASULGC).
- eXtension – Transformation of Cooperative Extension: Dr. Kevin Gamble, Associate Director, eXtension Information Technology.
- EERE Solar Energy Technologies Program (SETP) Update: Mr. Tom Kimbis, Market Transformation Director, SETP.
- EERE Building Technologies Program (BTP) Update: Mr. Jerome Dion, Acting Program Manager, SETP.
- EERE Industrial Technologies Program (ITP) Update: Mr. Douglas Kaempf, Program Manager, ITP.

PUBLIC FORUM

During the Public Forum segment, Mr. Richard King, the Director for the Solar Decathlon (DOE), and Mr. Dan Eberle, Solar Decathlon Rules and Regulations Committee Member (Crowder College, MO), provided the Board with a presentation of the DOE's Solar Decathlon event that is currently taking place on the National Mall.[§]

DISCUSSION OF FUTURE NATIONAL LABORATORY OUTREACH WEBINARS

During the August 2007 meeting (Berkeley, CA), the Board determined that it could assist the DOE National Labs in expanding their outreach efforts through webinar presentations that will relay specific laboratory technologies to the States and other interested stake-holder groups.

Gary Burch explained that during the weeks following the August meeting he was able to touch base with Julie Riel, the EERE Project Management Center's (PMC) States Coordinator – Golden Office, and confirmed that the PMC does possess the ability to facilitate webinar logistics. He further explained that he was able to relay this information to Ms. Marcy Beck (Energy Efficiency Technologies Division, Lawrence Berkeley National Laboratory (LBNL)), and suggested that she provide him with a few discussion topics that could be presented during the "pilot webinar."

[†] Copies of the presentations are available on the STEAB Web site: <http://steab.org/>

[‡] The FACA ethics briefing is a closed session for STEAB members. Copies of the presented material may not be made available to the general public.

[§] A copy of the Solar Decathlon presentation is available on the STEAB Web site: <http://steab.org/>

Gary Burch suggested that the Board now review the proposed topics provided by LBNL and begin thinking about a date for the webinar to take place. The proposed topics are as follows:

- 1) Pick an individual area that was covered during the August STEAB meeting:
https://gaia.lbl.gov/people/mwbeck/public/STEAB_presentations_081407/PDF%20versions/
- 2) Choose an umbrella topic and have three 15-minute segments followed by a question and answer segment where the Lab will address:
 - a) A new Commercial Buildings Initiative just seeded by EERE/Buildings involving three labs, the Alliance to Save Energy with outreach to stakeholders, including states, a key part of the project;
 - b) Data Centers – the ASEE is pushing the energy savings potential here through the EERE Industrial program; the Lab can highlight their work as well as let the audience know that their help is critical in identifying assessment sites throughout the U.S.; and,
 - c) Demand Response – the STEAB showed quite a bit of interest during the August meeting in terms of the technologies, policies, and programs relating to commercial customer load shedding during peak consumption. (The LBNL leads a Demand Response Research Center at the Lab that has been funded by the California Energy Commission and CA's Investor Owned Utilities.)

Gary Burch explained that in the near-term, the Board will want to focus on scheduling webinars for the four DOE Labs with the greatest focus on renewable energy and energy efficiency sciences (LBNL, National Renewable Energy Laboratory (NREL), Oak Ridge National Laboratory (ORNL), Sandia National Laboratory (SNL-NM)). And in the future, the Board can perhaps reach out to other DOE Labs and invite them to participate as well. He commented that for now, if the STEAB feels comfortable with moving this concept forward, then the Board should 1) forward feedback to LBNL regarding their proposed list of topics, and 2) develop a time window for the first session(s).

Janet Streff said that the Labs – at least initially – should concentrate on presenting more balanced topics and select a few specific technologies to present/discuss. Gary Burch agreed, and reminded the Board that this process is designed to help foster increased awareness of emerging and near-market ready technologies in hopes that their increased exposure will lead to faster market adoption and deployment within the States. He explained that if the topics presented are too broad, the webinars – at least initially – may not accomplish their underlying purpose. He explained that perhaps it would be best to attempt to identify the best products/technologies, and then present them to the parties that will be the most receptive – technologies that are more likely to flourish in a specific region. He explained that once the STEAB is able to receive copies of the “emerging technologies catalog” that Mr. Bruce highlighted upon, the Board may be able to scroll through it and develop a list of technologies/ideas in which the Labs could best present upon.

Peter Johnston inquired as to the possibility of the Board getting copies of the EERE “emerging technologies catalog,” suggesting that for the time being, the Board may only need information that discusses LBNL’s technology portfolio, if available. He further stated that if the associated text within the documents focuses on products as opposed to topics, then perhaps the Board may be able to identify two or three and incorporate them into the initial webinar.

Chris Benson agreed and suggested that the Board will need to develop a means of narrowing the topics down. Steve Vincent explained that there are many audiences with many members out there that can assist in the deployment of a new technology, and stated that he recently mentioned the Board’s August-meeting discussions about the LBNL’s Demand Response presentation to a conservation official at a utility who expressed a great deal of interest. Gary Burch explained that the underlying challenge would rest in identifying the proper audience and effectively communicating the opportunities. He further

explained that the audience will vary based on the topics and the quarter, suggesting that the State Energy Offices (SEOs) will be the best equipped to identify the most receptive audiences for the presented topics.

Chris Benson inquired as to when the best time would be to schedule the first webinar. Gary Burch stated that it would be best to pick a month that follows the upcoming holidays – early 2008. He then explained that although he does not want to slow any Board momentum in this regard, he suggested that it may be best to contact Marcy Beck at LBNL and convey the Board’s suggestion that that topics/technologies be selected with more specificity, and that LBNL propose new – or less broad-based – items for the Board to review during the next conference call (11/28).

STEAB STRATEGIC DIRECTION DOCUMENT FOLLOW-UP DISCUSSION:

The STEAB Strategic Direction document is a tool that assists the Board with identifying strategic focus areas in which the group can consult when considering the development of future Board Recommendations and Resolutions. The document contains four main sections: Legislative Mission and Responsibilities, Proactive Thrust, Strategic Focus, and an Appendix on the strategic planning process.

Legislative Mission and Responsibilities: STEAB was established by Public Law 101-440 (The State Energy Efficiency Programs Improvement Act of 1990) to advise the U.S. Department of Energy and the Congress on the operation of its Federal grant programs. The Board also advises on energy efficiency and renewable energy programs in general and on the efforts of the Department relating to research and market deployment of energy efficiency and renewable energy technologies.

Proactive Thrust: The STEAB is developing a long-range, proactive approach, and will develop, maintain and periodically update a Strategic Direction and plan to guide its activities as well as determine its structural, organizational, and operational approach. The Board is adopting a more proactive and less reactive approach when addressing important issues for the states and stakeholders.

Strategic Focus: The STEAB Strategic Focus Areas highlight certain strategies and goals that will allow the STEAB to stay informed with strategic areas of importance, greatly enhancing the Board’s ability to create effective Board Recommendations and Resolutions. Each of the STEAB Strategic Focus Areas will be guided by expected outcomes, measurable performance indicators and benchmarks that judge progress. These performance indicators and benchmarks will enable the Board to demonstrate benefit to the U.S. Congress, the Assistant Secretary for the Office of Energy Efficiency and Renewable Energy (EERE), and document value to the U.S. Department of Energy and the States.

Pat Sobrero began this discussion by providing some history of the document. She then summarized the Board’s activities during the August 2007 meeting, highlighting the four new STEAB Strategic Focus Areas that were developed: *Accelerate Energy Efficiency*; *Facilitate Technology Commercialization/Deployment*; *Facilitate Renewable Energy Advancement*; and, *Enhance Federal/State Synergies*. She then explained that the four Strategic Focus Areas and their respective expected outcomes, performance indicators, and benchmarks should be reviewed one final time in order to include any additional changes and/or additions prior to ratification. She then polled the Board for suggestions.

The Board made several small changes to the STEAB Strategic Focus Areas and their associated content. The revised STEAB Strategic Focus Areas appear below:

STEAB Strategic Focus Area #1: Accelerate Energy Efficiency Market Transformation

This focus includes:

- Affordability.
- Energy Efficiency as a Supply Resource.
- Energy Efficiency Credit Systems (EECs).
- Economic Development.
- Consumer Education.

Expected Outcomes:

STEAB Outcomes will lead to:

- Improved communications and awareness working with the Office of Energy Efficiency and Renewable Energy (EERE).
- Improved deployment strategies and tactics among stakeholders.
- Increased priority for energy efficiency among stakeholders.
- Support the implementation of the National Action Plan for Energy Efficiency (NAPEE).

Performance Indicators:

STEAB will measure the:

- Number of recommended communications strategies implemented (i.e., webinars, e-Xtension, etc.).
- Number of recommended strategies and tactics implemented by EERE through follow-up reports to the STEAB.

Benchmarks:

In 2008 STEAB will establish a baseline for benchmarks based on:

- Number of working relationships between stakeholders and National Laboratories.
- Number of working relationships between States and EERE's Project Management Center (PMC) sites.
- Documented use of technology transfer among and between partners.
- Documented success in strengthening visibility of energy efficiency.
- Number of stakeholders to join the Secretary of Energy's Energy Efficiency campaign.

Strategic Focus Area #2: Facilitate Technology Commercialization / Deployment

This focus includes:

- Affordability.
- Attract Venture Capital for Emerging Technologies.
- Economic Development.

Expected Outcomes:

STEAB Outcomes will lead to:

- Transfer of knowledge.
- Application of the technology.

Performance Indicators:

STEAB will measure the:

- Number of process and program changes recommended by the STEAB that enhance deployment effectiveness with States and partners.
- Number of recommended changes implemented by EERE through follow-up reports to the STEAB.

Benchmarks:

In 2008 STEAB will establish a baseline for benchmarks based on:

- Stakeholder participation in beta testing of lab technologies.
- Number of participants in webinars.
- Proof of deployment.

Strategic Focus Area #3: Facilitate Renewable Energy Advancement

This focus includes:

- Renewable Energy Credit Systems (RECs).
- Economic Development.
- Transmission Infrastructure.
- Consumer Education.

Expected Outcomes:

STEAB Outcomes will lead to:

- Improved deployment of renewable energy information from the DOE National Labs and other sources.

Performance Indicators:

STEAB will measure the:

- Number of deployment strategies and tactics that facilitate communication among government and other stakeholders.

Benchmarks:

In 2008 STEAB will establish a baseline for benchmarks based on:

- Number of communication events from the DOE National Laboratories.

Strategic Focus Area #4: Enhance Federal / State Synergies

This focus includes:

- Government Partner Collaboration (Local, State, Federal).
- Engagement of Additional Stakeholder Groups.

Expected Outcomes:

STEAB activities will lead to:

- Improved collaboration with all levels of government concerned with energy efficiency and renewable energy.
- The assistance in the application of the NAPEE.
- Number of involvement with higher education research and outreach initiatives in energy efficiency and renewable energy.

Performance Indicators:

STEAB will measure the:

- Number of EERE issues studied and analyzed.
- Number of recommendations resulting from study.

Benchmarks:

In 2008 STEAB will establish a baseline for benchmarks based on:

- Number of governmental agencies and higher education representatives involved.
- Documented attendance of interested stakeholders in webinar broadcasts.
- Active STEAB representation in NAPEE activities.

Motion adopted to approve the new STEAB Strategic Focus Areas, and to incorporate them into the STEAB Strategic Direction Document and the FY2007 STEAB Annual Report to the Secretary and the Congress.

Pat Sobrero moved to adopt the new STEAB Strategic Focus Areas for insertion into the STEAB Strategic Direction Document and the FY 2007 STEAB Annual Report, and Jim Ploger seconded the motion.

The motion passed unanimously with no oppositions or abstentions.

DISCUSSION OF THE FY 2007 STEAB ANNUAL REPORT TO THE SECRETARY AND THE CONGRESS

Pat Malone (TMS, Inc.) developed a DRAFT version of the Executive Summary for the FY 2007 STEAB Annual Report and provided copies for the Board to review. He explained that the STEAB Annual Report has followed a similar format for the past few years, and that the template has been very adequate in highlighting the Board's activities and accomplishments. The template includes the STEAB Strategic Direction document and copies of current fiscal-year Board Resolutions and Recommendations. He further explained that the Executive Summary provides a high-level summary of the Board's activities, and once approved it can serve as a basis for fleshing out the rest of the document.

The Board provided positive feedback based on the current DRAFT Executive Summary, suggesting only that it be slightly modified to better reflect the Board's activities over the course of the past year and include the proposed changes offered by the Board while it was being reviewed. Pat Malone agreed, and stated that he would rework the DRAFT Executive Summary and forward it to the Board for review in advance of the next conference call (11/28).

ISSUES/ OPPORTUNITIES IDENTIFIED DURING BOARD DISCUSSIONS/PRESENTATIONS

Discussion with Mr. David Rodgers and Mr. Steven Chalk:

Chris Benson suggested that Board think about their discussion hour with Mr. Rodgers and Mr. Chalk and attempt to identify some of the "key points/areas of interest" that the Board could ultimately use as a reference for developing future strategies that may assist the current efforts and objectives of EERE. There was no formal timeline set for developing these areas of interest; however, the Board determined that these issues do represent a good starting point in terms of future Board focus as they crosscut several sectors of the recently adopted Strategic Focus Areas. The following is a representation of the topic areas that the Board developed; the Board will continue to hold discussions on these areas over the next few weeks/months.

- States as “agents” for distributing energy education materials (“canned curricula”).
- STEAB to weigh in on the MOU for ENERGY STEAR – DOE/Environmental Protection Agency (EPA).
- Core templates and best practices – compilation of options that have been tested and adopted.
- Code models (States) – simplify codes; enhance compliance.
- Assist in taking renewables to higher levels.
- Revamping of the “Rebuild” – in the past, contractors were driving the program; not enough support/exposure from Federal entities.
- Citing and permitting required for interstate transmission lines.
- Advantage of regional manufacturing for wind energy.
- Building public energy ethics campaigns – bring energy efficiency awareness to the local level.
- Data centers: energy consumption projected growth from 1 – 3 percent.

John Davies stated that one of the areas highlighted above that may need some immediate attention is the apparent “disconnect” between the DOE and EPA in regards to ENERGY STAR, suggesting that this matter may have some affect on the speed of the delivery of energy efficient products and services. Chris Benson agreed, stating that the general “public doesn’t know, nor do they need to know,” which products are sponsored by either the DOE or EPA – the public needs to be able to obtain energy efficient products and the possibilities of “turf disputes” could ultimately slow the introduction of these said products.

Dub Taylor inquired as to whether the EPA has a similar FACA Board that could be contacted to perhaps “bridge a gap.” Gary Burch said that he would be reluctant to involve EERE HQ in such a venture, suggesting that if the STEAB would like to pursue this, that it is done using the Board’s discretion. John Davies said that this may be a good idea, but hinted that any potential feud is not the STEAB’s responsibility to salvage. He then stated however, that additional information may be helpful should the ASEE not be aware that this may be undercutting programs.

Elliott Jacobson volunteered to look into matter in hopes of identifying whether or not an EPA-equivalent Board exists, and agreed to update the Board on his findings during the next monthly conference call (11/28).

A second opportunity that the Board identified as being a possible means for the STEAB to assist EERE is in the area of “energy education.” Alexander Mack explained that he recognized this topic as being of a particular interest/concern of Deputy Assistant Secretary Rodgers during his discussion, stating that EERE appears to have a desire to improve the dissemination of information and materials, especially on the “educational side of things.” He agreed to begin thinking about a potential Board Resolution that will attempt to identify the issues, benefits, and areas of opportunity in which the States may serve as “agents” for EERE in the distribution of energy-education materials.

With Alexander Mack serving as the “lead participant,” Peter Johnston, Pat Sobrero, and Duane Hauck also volunteered to assist Mr. Mack in this effort.

Gary Burch suggested that Mr. Roger Meyer, the Lead Energy Technology Program Specialist for EERE’s Office Technology Advancement and Outreach, be contacted so that the Board may garner a better understanding as to how the flow of information is directed outward from EERE, suggesting that he perhaps be invited to the next and/or subsequent conference calls. In addition, he suggested that Mark Bailey be considered as well as he too may be able to add some perspective on how the Board can facilitate EERE’s distribution of energy-education materials.

Discussion with Mr. Michael Bruce:

The Board then turned its attention to the discussion hour with Mr. Michael Bruce, commenting on the fact the Commercialization and Deployment team is a non-permanent entity within EERE. The Board agreed that it was refreshing that the ASEE is very dedicated to increasing the awareness of, and also deploying emerging and near-market ready energy efficient and renewable energy technologies, and recommended taking actions that suggest EERE to make sure that a similar focus is in place that will continue under future administrations.

Jim Nolan volunteered to draft some language for a potential Resolution that supports EERE's current Commercialization and Deployment initiative, calling for the organization to consider forming a permanent Office or organizational entity that continues this focus into the future. Pat Malone (TMS, Inc.) and Jim Nolan shared their DRAFT Resolution with Board prior to the conclusion of the meeting, and were able to receive some additional comments that were suggested by the Board. In conclusion, it was decided that the DRAFT Resolution be slightly modified to include the Board's comments and be re-distributed in advance of the November 28, 2007 conference call for final consideration.

Discussion of eXtension:

Duane Hauck reintroduced the Board to the earlier presentation that discussed the eXtension program, commenting that the web-based database has the potential to provide American consumers with a plethora of information resources about educational programs that encompass hot-topic areas such as economic and community development, agriculture, environment, and also energy efficiency. He explained that eXtension could also be used as a tool to connect participants with local information resources as well, and commented on Mr. Kevin Gamble's earlier comment about how he set a goal for the program to automatically recognize the reader's locality, so as to provide the reader/researcher with more specified target information upon first-level of queries.

Janet Streff mentioned that she had worked with a non-profit company in Minnesota that is developing sustainable partnerships with entities within the "extension network" so as to develop a conduit that reaches out to citizens and provides them with energy efficiency information. She further added the eXtension may serve as a powerful tool for the dissemination of similar information on national, state and local scales, providing readers with information, and answering questions on a broad range of energy topics: strategic energy plans, more efficiency energy in schools, etc.

Duane Hauck suggested that the Board consider developing a Resolution that encourages EERE to engage with, and also explore partnerships with NASULGC and the eXtension developers. John Davies agreed. Chris Benson suggested that Duane Hauck and John Davies begin thinking about developing some background for a potential Board Resolution that emphasizes that EERE consider working more closely with educational delivery process/entities such as eXtension and NASULGC.

Weatherization Discussion:

Elliott Jacobson explained that after listening to Mr. Rodgers and Mr. Bailey's discussions, he could not help but to recognize that the WAP is in danger of receiving a zero-budget number for FY 2008 despite the fact that EERE is again anticipating another 300 to 400 million dollar plus-up in appropriations. He explained that the Board has attempted similar Resolutions in the past that stress the importance of the WAP, and suggested that the Board consider forwarding another form of correspondence: a letter of support that he and Susan Brown developed that not only offer suggestions about the WAP, but also

shows the ‘weatherization community’s’ interest in sharing information and being open to suggestions about the future of the program.

Alexander Mack stated that Washington is a place of “spin,” and inquired if there has ever been an effort to “spin” the WAP to show the programs importance from the perspective of individuals or entities that support the program but cannot benefit from it due to the lack of funding. Pat Sobrero said that number of homes served vs. the ROI for WAP dollars is a very abstract, and suggested that perhaps more research could be done to show a better ROI under a new formula. Gary Burch suggested that whatever the Board does decide to do, that it is kept consistent (i.e., show the linkages within of the program, its benefits, etc.).

Elliott Jacobson stated that this effort may be accomplished in one of two ways: A letter of support that is formally endorsed by the STEAB, or a letter that is crafted by Board members with the most experience and knowledge of the WAP that would be endorsed separately. Peter Johnston said that he may have an issue with signing the document as he is not a Weatherization expert and is not familiar with the facts. Duane Hauck agreed, citing his limited experience with the WAP.

Elliott Jacobson suggested that the letter may carry additional “weight” should it come from the Board itself, and explained that the facts within are pretty good. Chris Benson stated that for the time being, the letter should not reflect that it is a product of the STEAB; however, he suggested that the Board could look over the letter post-submission to discuss its potential for future adoption in the form of a Resolution or Recommendation.

Elliott Jacobson agreed to finish writing the letter and will make arrangements to circulate the letter to the Board in hopes of soliciting suggestions and/or participants willing to “sign” the letter in advance of its submission to EERE.

NEXT MEETING LOCATIONS:

The next Board meeting is tentatively scheduled for April 8–11, 2007. Gary Burch suggested that the STEAB visit the Sandia National Laboratory in NM, with the intent of having one full-day at the Lab and two full-days at a conference location at an area hotel.

ADJOURNMENT: The meeting was adjourned at 11:26 a.m. on Thursday, October 18, 2007.

ACTION ITEMS arising from the October 2007 STEAB meeting are highlighted below:

In the coming weeks / months, the Board has several action items on the agenda with associated timeframes to ensure their effectiveness. The Board is currently considering an April 2008 meeting at the Sandia National Laboratory (NM). In addition, the Board is also considering several potential actions based on topics discussed during this meeting, with the intention of re-visiting them for further discussion during the November 28, 2007 conference call.

Actions	Responsible Party	Due Date	Status
Make presentations available to all members.	TMS, Inc.	ASAP	In Progress.
Draft formal “Thank You” letter(s) to EERE speakers.	TMS, Inc. / Chris Benson	ASAP	Complete: Letters were drafted, signed and delivered.
Minutes of the STEAB Meeting in Washington, DC.	TMS, Inc. / DFO / Executive Committee	Submit DRAFT minutes to DFO and the STEAB Executive Committee for review (within 4 weeks of adjournment).	Incomplete: Make public within 60 days of adjournment (December 18, 2007 – STEAB Web site).
Follow-up with the LBNL to discuss potential “next-steps” for determining content for webinars.	Gary Burch / Julie Riel	ASAP	Complete: Gary Burch and Julie Riel contacted LBNL to solicit additional information about the Lab’s “near market-ready technologies” in the area of “Demand Response.” David Rathbun (TMS, Inc.) forwarded the new information to the Board on 11/1 so that the STEAB has time to review the material and make a final determination during the November 28, 2007 conference call.
Make copies of the material from the DOE Venture Capital Technology Showcase.	David Rathbun (TMS, Inc.)	ASAP	In Progress: David Rathbun has contacted Mr. Bruce and he agreed to forward a link to the said documents.
Next Meeting(s) Sandia National Laboratory (April 2007)	TMS, Inc. Gary Burch	ASAP ASAP	In Progress: Identify lodging and conference options for the week of April 7–11, 2008. In Progress: Gary Burch to confirm with Sandia National Lab that 4/8/2008 is a feasible date for hosting the Board visit.

Actions (cont'd)	Responsible Party	Due Date	Status
<p>Identification of an EPA-equivalent FACA Board.</p>	<p>Elliott Jacobson</p>	<p>ASAP</p>	<p>Incomplete: Elliott Jacobson to attempt to identify any EPA-equivalent FACA Board that may be able to assist in “bridging a gap” between the EPA and DOE regarding ENEGY STAR, and brief the Board during the November 28, 2007 conference call.</p>
<p>Proposed Resolution 1: “States as Agents for the Distribution of Energy-Education Materials.”</p> <p>Consider contacting Roger Meyer and Mark Bailey to participate in future conference calls to better understand how EERE disseminates information outward; to solicit information as to how the STEAB may facilitate the notion of EERE using the States as the primary vehicle for the distribution of energy-education materials.</p>	<p>Alexander Mack, Duane Hauck, Peter Johnston, and Pat Sobrero</p> <p>Chris Benson/Gary Burch</p>	<p>ASAP</p>	<p>Incomplete: Alexander Mack, Duane Hauck, Peter Johnston, and Pat Sobrero to begin thinking about and/or identifying issues and opportunities for a potential Board Resolution that calls upon EERE to use States as “Agents” for the dissemination of Energy-education materials.</p>
<p>Proposed Resolution 2: “EERE to work more closely with educational delivery process/entities such as eXtension and NASULGC.”</p>	<p>Duane Hauck, John Davies</p>	<p>ASAP</p>	<p>Incomplete: Duane Hauck and John Davies to begin developing background for a potential Board Resolution that emphasizes that EERE consider working more closely with educational delivery process/entities such as eXtension and NASULGC.</p>

Actions (cont'd)	Responsible Party	Due Date	Status
<p>Proposed Resolution 3:</p> <p>“STEAB support of EERE’s current Commercialization and Deployment initiative.”</p>	<p>David Rathbun/Pat Malone and Jim Nolan</p>	<p>ASAP</p>	<p>Complete: Jim Nolan and Pat Malone developed a draft Resolution during the October meeting that shows support of the current Commercialization and Deployment initiative, recommending that EERE establish a more permanent Office that will continue this focus after the current administration. The Board provided some preliminary feedback and those changes were added to the document. Board to discuss the document again during the November 28, 2007 conference call to determine if additional changes are needed and/or its subsequent adoption.</p>
<p>STEAB FY2007 Annual Report Follow-Up:</p>	<p>David Rathbun and Pat Malone (TMS, Inc.)</p>	<p>ASAP – In advance of the next STEAB conference call.</p>	<p>Complete: Develop a revised version of the STEAB Annual Report to include Board members’ comments and forward to the Board for review for discussion during the November 28, 2007 conference call.</p> <p>Incomplete: Develop a preliminary DRAFT of the STEAB Annual Report and forward to the Board for review for approval.</p>

Formal Motions Adopted During the Meeting:

- *Motion adopted to approve the new STEAB Strategic Focus Areas and to incorporate them into the STEAB Strategic Direction Document, and the FY2007 STEAB Annual Report to the Secretary and the Congress.*