

State Energy Advisory Board Meeting
April 8-10, 2007
Albuquerque, NM
A Visit to the Sandia National Laboratory

BOARD MEMBERS PRESENT

Chris Benson (Chairman) (AR), Patricia Sobrero (Vice-Chair) (VA), Elliot Jacobson (Secretary) (MA), James Etta Reed (PA), Janet Streff (MN), Duane Hauck (ND), Peter Johnston (AZ), John Davies (KY), Jim Ploger (KS), Jim Nolan (MT), Susan Brown (WI), Steven Vincent (OR), Paul Gutierrez (NM), Daniel Zaweski (NY), and Robert Hoppie (ID).

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), Alexander Mack (FL)*, William "Dub" Taylor (TX), and David Terry (VA).

April 8, 2008

On the meeting's first day the Board visited the Sandia National Laboratory. The Lab provided the Board with several presentations on the current activities and successes of its Energy and Infrastructure Assurance Program, and also provided the Board with a tour of its Concentrated Solar Power and Distributed Energy Technology laboratories.

WELCOMING & INTRODUCTIONS

Chris Benson opened the meeting with brief introductions. He then summarized the meeting's agenda and highlighted the list of presenters.

PRESENTATIONS[†]

The Board listened to presentations on the following topics:

- Overview of Renewable Energy at Sandia: Rush Robinett III, Senior Manager, Energy & Infrastructure Future Program.
- Photovoltaics (PV) at Sandia: Jeff Nelson, Manager, Solar Technologies.
- Concentrated Solar Power (CSP) at Sandia: Thomas Mancini, CSP Program Manager.
- Wind Energy at Sandia: Daniel Laird, Sandia Wind Energy Technology Dept.
- Energy Storage at Sandia: Georgianne Peek, Sandia Energy Infrastructure and Distributive Energy Resources (DER).
- PV Renewable Systems Integration: Juan Torres, Manager, Energy Systems Analysis.
- Geothermal Energy at Sandia, David Smith, Sandia Geothermal Program.

* Alexander Mack participated via conference call.

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

April 9-10, 2008

PRESENTATIONS[‡]

- Sandia Entrepreneur in Residence (EIR) Program: Craig Tyner, Sandia National Laboratories, and Tom Brennan, ARCH Venture Partners.
- A Venture Capital Perspective on Technology Transfer and Alternative Energy, Stephanie Spong, EPIC Ventures.

FOLLOW-UP DISCUSSION OF THE LABORATORY VISIT:

Chris Benson suggested that the Board attempt to identify a few key “thoughts” or “observations” based on the presentations and discussions that were conducted the previous day.

Chris Benson stated that he felt the Lab presentations provided a lot of good information about Sandia’s renewable energy research and development (R&D) programs, and that he especially liked the tour of the “Solar Tower” that was provided. He further stated that he was impressed by the Lab’s presentation and discussion on the new EIR Program, commenting that this is a “positive step” for Sandia – and the other DOE National Labs – to showcase their new and emerging technologies and help facilitate their emergence into the commercial marketplace.

Steve Vincent agreed with Chris Benson’s comments and stated that the EIR Program can serve as a means to accelerate commercialization and deployment efforts for emerging and existing technologies. He then recommended that the Board consider developing a potential Resolution that conveys the Board’s support for the EIR Program. Gary Burch stated that this may be a good topic for consideration as the “concept” of EIR Program already has the “buy in” of the Secretary of Energy – the Board agreed. Chris Benson recommended that Steve Vincent and Paul Gutierrez team up to develop a DRAFT Resolution for the Board to consider in advance of the next conference call (5/15).

Thoughts/Observations Resulting from the Laboratory Presentations and Tour:

The following list contains the thoughts and observations captured in the Board’s facilitated brainstorming session immediately following the Sandia presentations, tour, and discussions. The items below that have been further deliberated and acted upon are reflected in the notes above. The remainder may emerge as subjects for further discussion at a later date.

- Transmission of alternative energy problem
 - (Office of Electricity [OE] engagement)
 - Board activity
- Water / Energy Mutual Dependency / Impacts
 - (National Renewable Energy Laboratory [NREL] expertise) – Report on Energy in the West
- Long-term R&D
 - Sustained funding policies

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

- National Labs to Announce “We’re Open for Business.”
 - EIR process
 - Webinars can help
 - Role for State Universities?
- Additional Webinar Topics for Sandia
 - Solar – dish engines
 - Geothermal – drill sensors
- Microgrid Technology
 - Smart metering
 - Utility Models
- Behavioral Modeling
 - Follow up with study provided during the Berkeley meeting (8/2007)
- “Connect the Dots”
 - Financing → loan guarantees
 - Market development → webinars
 - Selection of candidates / opportunities
- Sunshine to Petrol
- Solar America Initiative and Links

FOLLOW-UP DISCUSSION OF THE PROPOSED RESOLUTION “STATES AS AGENTS FOR THE DISSEMINATION OF ENERGY EDUCATION MATERIALS”:

Peter Johnston referenced the discussion that took place during the October 2007 STEAB Meeting where Mr. David Rodgers, the Deputy Assistant Secretary of Energy Efficiency, and Mr. Steven Chalk, the Deputy Assistant Secretary for Renewable Energy, expressed their desire for EERE to increase its energy education dissemination efforts. He added that Mr. Rodgers stated that the DOE has a plethora of energy education materials but has no mechanism (i.e., “agents”) to disseminate them. Peter Johnston continued by explaining that when the preliminary discussions for developing the Resolution were being held, it was his initial thought that the purpose of the Resolution would be to recommend that the dissemination of materials be geared toward “workforce development” in attempts to alleviate the potential shortfalls that are predicted with the retirement of the “baby boomers.”[§] He then added, however, that since that time he has participated in several conference calls on the topic, and has since realized that the majority of DOE’s educational materials were being aimed at consumers. With that being said, he inquired as to where the Board should take this potential Resolution, adding that publicizing specific energy-education Web sites may be an alternative for disseminating educational materials, etc. In closing, he explained that his last conversation on the topic was with a person at the Golden Office who was working to develop a comprehensive list of all energy educational materials and internet sites, but he has yet to hear back on the status of that effort.

[§] During the October meeting, a statistic was provided to the Board suggesting that nearly 50% of the American workforce will be retirement eligible within the next 10 years, and that there is a growing need to push energy interest and awareness in younger generations.

Duane Hauck stated that the Board conducted previous discussions that suggested the possibility using the Collaborative Extension Services as conduit. He further added that the National Association of State Universities and Land-Grant Colleges (NASULGC) is currently developing a grant proposal for submission to the DOE in hopes of better increasing the effectiveness of the eXtension search engine in order to provide more information on energy efficiency-related issues to the public. He added that the eXtension site went live in February (2008), and that its goal is to serve as the national connection for the Extension Services. He further added that the site is set up to provide local and regional information to readers based on their location, and that the information available will be “only the best information available” for a specific locality, etc. The information is also peer reviewed for accuracy.

Chris Benson inquired as to whether or not the DOE – or EERE – is nearing any type of “decision point” in regard to accepting this proposal, and added that perhaps the STEAB could consider a Resolution or Recommendation that supports the eXtension site and its benefits, etc. Duane Hauck stated that he could contact James Wade, Director of Extension and Outreach (NASULGC), in order to gain more information as to where the proposal is in the process and agreed to update the Board during the next conference call (May 15, 2008).

Gary Burch suggested that there is a “defined need” in terms to what the eXtension site is trying to accomplish. Chris Benson agreed, and stated that the DOE is still using “old methods” for disseminating information and that it was his inference that Mr. Rodgers was reaching out for new ideas when he addressed the Board this past October. Peter Johnston agreed and stated that it would be a good idea for the DOE to tap into the Extension Services – and eXtension – as a possible conduit for disseminating all types of information.

Duane Hauck explained that it is estimated that it will take approximately \$200,000 in order to get eXtension up to the level of efficiency necessary to provide the types of services that that were highlighted above. Gary Burch inquired as to what additional sources of funding may be available to subsidize eXtension. Duane Hauck stated that a farm bill may be a possibility, and Janet Streff explained that she is aware of a grant coming out soon that eXtension may fit into.

Gary Burch explained that the STEAB Officers will be trying to schedule a meeting with Drew Bond and Michael Bruce (EERE Commercialization and Deployment Office) at end of May or early June, and that this issue could be raised with them so that the Board can “pulse” their thoughts in terms of how it could be funded. He further stated that it may be beneficial to draft this issue in “paper form,” adding that it be structured it in such a way so as to highlight how this effort could lead to commercialization efforts, etc. Duane Hauck reiterated that he will speak to James Wade about this and will see if it is possible to get a copy of the proposal prior to the next call. In closing, Peter Johnston inquired if the Resolution should be diagramed around eXtension, and Gary Burch recommended that the Resolution effort remain idle for the time being until the Board can find out “where the discussions would lead us.”

LAWRENCE BERKELEY NATIONAL LABORATORY (LBNL) WEBINAR LOGISTICS:

Chris Benson explained that the LBNL pilot webinar is now scheduled for April 30. He further added that the announcement for the event is currently being developed and that a final copy will be available soon for the STEAB to “weigh in on” prior to it being sent out. He further noted that in terms of the dissemination of the invitation is concerned, the State Energy Offices (SEOs) will use the National Association of State Energy Offices (NASEO) Board to “back up the transmission,” and Julie Riel and James Fergusson (EERE Project Management Center [PMC] States Coordinators) will also be working to disseminate the announcement. The call will have 100 lines for each session (a.m. and p.m. session), and registration will be accepted on a “first-come-first-serve” basis – LBNL’s Aerosol Duct Sealing technology will be the primary topic of the webinar.

Gary Burch explained that he has still not received an advance copy of the Power point slides for the webinar, and inquired if any additional “permissions” will be needed in order to discuss the Duct Sealing technology. Chris Benson explained that all of the “clearances” are in place and that the technology has been approved for discussion. He then opened the floor to suggestions as to the webinar’s recommended length.

Peter Johnston stated that with just one topic being discussed, a one-hour timeslot may be sufficient. Steve Vincent agreed and stated that a 60 minute webinar/presentation may be better in terms of soliciting attendance – more attendees are likely to commit to a one-hour session as opposed to more lengthy session. Pat Sobrero suggested that perhaps a method be put in place that would allow questions that could not be answered within the time period to be e-mailed in at a later time. That way, additional questions could be accommodated should there not be enough time to address everyone’s comments.

Gary Burch explained that he is reluctant to assume that the Lab would be available to answer any follow-up questions after the webinar’s conclusion, and suggested the possibility of having the webinar last 90 minutes so that additional Q+A could take place. That way, the webinar hosts – and attendees – would have the ability to adjourn earlier should they not need the entire 90 minutes.

Follow-up next steps:

Gary Burch explained that he will “report back” that the webinar should be 60 minutes in length, and as a “side bar,” that it be lengthened (if necessary) to accommodate any Q+A that couldn’t be addressed within the first hour. He added, however, that the invitation will state that the webinar is a “60 minute exercise.”

Pat Sobrero recommended that a “Land-Grant presence” be at the webinar(s) and suggested that the different Extension Service officers be contacted and made aware of the announcement. Gary Burch agreed and recommended that Pat Sobrero contact Michelle New (NASEO) and provide her with a “master list” of extension service contacts. That way, NASEO can alert the SEOs to the fact that they should expect calls from Extension Service representatives.

PUBLIC FORUM:

No comments were made.

NEXT MEETING LOCATIONS:

Gary Burch suggested that the next Board meeting take place in either August or September 2008 and that the STEAB consider the National Renewable Energy Technology Laboratory (NREL) as the location for the next meeting. He further added that due the Board’s interest in Sandia’s EIR program, NREL would be the most logical follow-up location as it is one of only three National Labs with the EIR Program in place – the Board agreed. He further noted that the Board schedule the NREL visit with one full-day at the Lab and two full-days at a conference location or similar venue. He also stated that Sandia is relatively close in proximity to NREL and that the Board consider inviting Mr. Tyner and Mr. Brennan to come and provide an update on Sandia’s EIR activities, etc.

Sue Brown stated that the NASEO and the National Association for State Community Services Programs’ (NASCSPP) semi-annual meetings are likely to take place in September, 2008, and recommended that the next meeting be moved to mid-August. Gary Burch noted that those organizations’ meetings may pose a conflict for some of the Board’s members and stated that he will leave it up to the Board to decide.

The group agreed that NREL was a good choice and that a mid-to-late August meeting would be more feasible.

Jim Nolan inquired as to the possibility of the Board visiting the National Energy Technology Laboratory (NETL) in Morgantown, WV. He further noted that although he is aware that NETL does not have a great “EERE presence,” it may in the coming future. Gary Burch stated that a visit to NREL would make the best sense, especially due to the Board’s interest in the EIR program. In closing, he added that he will check with the staff at NREL to see if they will be available to meet with the Board during the week of August 11, and that he will get an e-mail off to select representatives at NREL in the coming days.

Gary Burch explained after the August (NREL) meeting, the next STEAB meeting will take place in Washington, D.C., perhaps in early December 2008 so that any new Special Government Employees (SGEs) can be sworn in, etc. He further stated that the Office of Management and Budget (OMB) passback is due the Friday after Thanksgiving, and noted that early December will be an opportune time to hold the next D.C. meeting as it will be post-election and the Board will have a better indication as to who the new administration may be. The Board felt that December was the most preferable time for a winter meeting and Gary Burch agreed to check and make sure that an early December meeting would not coincide with other events.

Chris Benson inquired as to what the content for that meeting would include, more specifically, whether or not members of the new administration would be available to meet with the Board. Gary Burch explained that a new Assistant Secretary for EERE would likely not be appointed for several months. However, he recently learned that EERE has secured three limited-term Senior Executive Service (SES) employees (5 years) to serve in EERE’s Commercialization and Deployment Office, and recommended that the Board attempt to dialogue with them in order to start building a relationship with the STEAB. In addition, he added that it may be beneficial for the Board to meet with them in the beginning of their term so as to “get a read” on their expectations, and also to identify what the STEAB can do to assist them, etc. In closing, he stated that he will “keep tabs” on their placement to see if they are scheduled to come on board in time for the December meeting.

John Davies stated that with a new administration, there will most likely be a Continuing Resolution, and that it may take until January 2009 before the Board can identify who the new officers in EERE will be. Gary Burch agreed and said that there is no reason that the Board could not consider a postponement until January as both dates may be good in terms of being able to meet with the new SESs.

In closing, Chris Benson stated that the amount of presentations that Sandia provided the Board over a short period of time made the presentation and Q+A sessions feel “a bit overscheduled.” He then polled the Board for their thoughts on the matter. Duane Hauck stated that the Board heard a great deal of information during the meeting’s first day, and commented that additional discussion time and Q+A would have been helpful. Jamie Reed suggested that perhaps in the future, Laboratory presentations be split over multiple days so that the Board can better “digest the information.” Chris Benson agreed and suggested that for future Laboratory visits that the Board perhaps be allowed to view the suggested presentation topics in advance in order to “filter” them in terms of Board interest/preference, etc. John Davies agreed and further suggested that perhaps the Laboratory presentations with the most promising technologies be considered first and foremost – the Board agreed.

OPEN FORUM

The subject on how the STEAB should conduct future communications between itself and the “front office” was revisited.

Duane Hauck suggested that the next time the STEAB interfaces with EERE management, that the Board should attempt to seek a “response” to previously submitted Board Resolutions in order to determine their “relevance” and “acceptance,” etc. Gary Burch explained that the only confirmation that the STEAB should expect from the front office is that the Board Resolutions have been “received,” and commented that there is no mechanism in place to dialogue on the matter of whether a Resolution and/or Recommendation was useful or will be implemented, etc. He then added that instead of attempting to interface with headquarters as to the relevance of the Board’s Resolutions, the Board would be better served by opening communication lines with the three new SES employees that will soon be working in EERE’s Commercialization and Deployment office, especially since commercialization efforts have been a recent and ongoing focus of the STEAB.

John Davies suggested that the Board attempt to identify how the STEAB should move to begin interactions with the new administration. Chris Benson agreed but stated that regardless of the administration’s view (i.e., positive or negative) of the STEAB, the Board has tried “just about everything” over the years to communicate with EERE and has met with limited success. He further added that Board is “serious about the mission that it has,” commenting that “a lot of effort has been spent trying to build communication channels that have been weak for some time now.” Instead, he added, the Board should attempt to “find a communication linkage to the Hill that has some advocacy and tenure to it.” Jim Nolan agreed and commented that the STEAB Charter states that the Board’s Annual Report is to be submitted to both the Secretary and the Congress. He then stated that as a start, the Board could attempt to identify persons on “the hill” to whom future reports should be delivered. Gary Burch explained that once the STEAB Annual Report is turned in to the Secretary of Energy, the Board is free to disseminate the report to whomever they please.

Pat Sobrero recommended that the STEAB develop an internal committee that will focus on developing strategies for how the STEAB can communicate information to “the Hill”—the Board agreed. Pat Sobrero, Jamie Reed, Janet Streff, John Davies, and Steve Vincent all volunteered to be a part of this effort – there were no opposing remarks.

Chris Benson commented that Board needs to be proactive and he believes that this will be a good step for creating new relationships. Janet Streff agreed and said that two things are happening right now: 1) there is an increased interest in the STEAB to help facilitate commercialization of new technologies; and, 2) block grants. She added that block grants could be something very good for the States, and recommended that the Board keep the subject of block grants “on their radar.” Chris Benson agreed that block grants are an important topic for the Board, but commented that he is unsure if a Board Resolution would be necessary on this topic in regards to indicating the Board’s interest in pushing them forward. He added, however, that should the DOE – or other entity – ask for STEAB’s help on the matter of block grants, then the Board should look for ways to assist. Jim Nolan recommended that the Board consider a Resolution that shows the STEAB’s recognition of the importance of Energy Efficiency and Conservation block grants, and that it conclude by offering to assist the DOE in any role that they deem necessary to support the effort – the Board agreed. Jim Nolan and Pat Malone (TMS, Inc.) developed DRAFT Resolution for the Board to consider.

Motion to Adopt Resolution 08-03: STEAB support for Energy Efficiency and Conservation Block Grants.

Jim Nolan moved to adopt the Resolution and Bob Hoppie seconded the motion.

Resolution 08-03 passes with no oppositions or abstentions.

ADJOURNMENT: The meeting was adjourned at 10:52 a.m. on Thursday, April 10, 2008.

ACTION ITEMS arising from the April 2008 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 August 2008 meeting at NREL (CO). 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 May 15, 2008 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	In Progress.
Minutes of the STEAB Meeting in Albuquerque, NM.	TMS, Inc. / DFO / Executive Committee	Submit DRAFT minutes to DFO and the STEAB Executive Committee for review (within 4 weeks of adjournment).	In Progress: Make public within 60 days of adjournment (STEAB Web site). In Progress: NASEO would like a brief summary of the Sandia visit and any actions taken by the Board.
Follow-up with new contractor to discuss potential “next-steps” for support transition, as well as the safe handling of Board member personal information after the transition.	Gary Burch, David Rathbun (TMS)	ASAP	Complete: Gary Burch and David Rathbun began to speak with a representative of the new support contractor (Sentech, Inc.) – more talks will be scheduled.
Next Meeting(s) (NREL) (August 2008)	TMS, Inc./ Sentech, Inc. Gary Burch	ASAP ASAP	In Progress: Identify lodging and conference options for the week of August 11, 2008. Complete: Gary Burch to confirm with NREL that 8/11/2008 is a feasible date for hosting the Board visit.

Actions (cont'd)	Responsible Party	Due Date	Status
Lawrence Berkeley National Laboratory (LBNL) Pilot Webinar (April 30).	Pat Sobrero	ASAP	<p>Complete: Pat Sobrero to contact Michelle New (NASEO) in order to disseminate a master list of extension service contacts.</p> <p>Complete: Alert NASEO to make contact with those representatives to make them aware of the Webinar.</p>
Increase / Open Communications with Representatives from EERE's Commercialization and Deployment Office and OMB	<p>Gary Burch</p> <p>Ad-hoc Team (Janet Streff, Pat Sobrero, Chris Benson, Elliott Jacobson).</p>	ASAP	<p>In Progress: Gary Burch to begin preliminary discussions with Drew Bond and Michael Bruce to reinforce the Board's interest in supporting EERE's commercialization and deployment (C&D) efforts.</p> <p>In Progress: Team to consider a "sooner than later" interface with the Commercialization and Deployment Office to determine what assistance the Board can offer with EERE C&D efforts.</p>
Increase / Open Communications with "the Hill."	Ad-hoc Team (Pat Sobrero, Jamie Reed, Janet Streff (lead), John Davies and Steve Vincent).	ASAP	In Progress: Team to consider strategies for how the STEAB can interface with the Congress.

Formal Motions Adopted During the Meeting:

- *Motion adopted to approve Resolution 08-03, STEAB support for Energy Efficiency and Conservation Block Grants.*