

Energy Policy Summit generates research ideas

By Marilyn Whitney, INL Communications

Energy experts recently gathered in Boise to discuss research projects that could help leaders develop effective energy policy for the state and region.

The Energy Policy Institute (EPI) held its first summit at Boise State University March 12-13. Sponsored by the Center for Advanced Energy Studies (CAES) and the Idaho Office of Energy Resources, the summit brought together faculty and researchers from the four CAES institutions — Boise State University, Idaho State University, University of Idaho and Idaho National Laboratory. Sponsors plan to hold the summit annually.

The first day of the summit was open to the public and featured presentations by a diverse group of experts and leaders who provided their perspectives on Idaho's energy issues.

Speakers included legislators, the Idaho Office of Energy Resources, utility representatives, regulators, the transportation sector and the environmental community.

They addressed energy issues for the nation and the state with emphasis on Idaho's significant energy resources as well as challenges. Effectively addressing energy generation, transmission, transportation and the environment are critical to the state's economic growth, job creation and rural development.

Idaho National Laboratory Director John Grossenbacher delivered the keynote address on the role science and technology play in decisions on energy policy. "The issue of energy technology and public policy is of great importance to our economic and environmental future," he said. "How do we want to produce, distribute and consume energy? What legislation, international agreements, public spending, economic incentives, taxes and other public policy instruments will be effective in getting us to collectively produce,

distribute and consume in a way we are happy with today and tomorrow? I expect this EPI summit to be a tool that can serve the public interest by providing insights, analysis and an appropriate forum to consider these questions."

Sen. Kate Kelly (Dist. 18) and Rep. Eric Anderson (Dist. 1) discussed the state's energy challenges and answered questions from the audience on energy legislation in Idaho. Other presenters included Idaho Office of Energy Resources Administrator Paul Kjellander, Betsy Bridge with the Idaho Conservation League, CAES Director Harold Blackman, Constance White from the Western Renewable Energy Generation Information System, Utah Transit Authority Chief Operating Officer Jerry Benson, Rocky Mountain Power President Richard



INL Director John Grossenbacher delivers the keynote address at the Energy Policy Institute's inaugural summit in Boise.

Walje and Idaho Public Utilities Commissioner Marsha Smith.

Faculty and researchers from the CAES institutions returned on day two of the summit to work in small groups, generating research ideas that could benefit energy policy development. The teams focused on seven areas for research ideas: policy decision-making, supply side, demand side, energy/water nexus, carbon management, energy economics and systems and analysis. Their objectives included developing a scopes of work for potential energy policy research project ideas and forming project teams capable of continuing the development of these ideas after the workshop.

Potential research projects discussed were:

- Evaluation of renewable portfolio standards (RPS) in other states, national policies on RPS and their potential effects on Idaho,
- Development of a regional energy supply life-cycle analysis,
- Creation of a public opinion survey to evaluate perception of risk for various energy options, the source of these attitudes and the level of knowledge of energy options,
- Study of the integration of energy generation technologies, options and their potential impacts,
- Development of a methodology for analyzing energy options, and
- Creation of a classroom game on energy systems.



Dr. John Freemuth, EPI's interim director, works with a group collaborating on research ideas related to energy systems and analysis.

The summit took an important first step toward building a research community on energy policy within the Center for Advanced Energy Studies. The next steps include transferring the research ideas into a scope of work format and generating funding proposals in order to move forward on applied research to tackle energy-related challenges.

Links:

Visit the Energy Policy Institute Web site.
<http://www.boisestate.edu/energypolicyinstitute/index.htm>

Read coverage of the summit from the Idaho Statesman.
http://voices.idahostatesman.com/2009/03/16/rockybarker/inl_lab_chief_grossenbacher_talks_frankly_about_technology_and_p

Read a transcript of John Grossenbacher's keynote address.
http://media.idahostatesman.com/smedia/2009/03/16/09/Grossenbacher.source.prod_affiliate.36.pdf

INL, state and local officials help dedicate CAES

By Kortny Rolston, INL Communications

Two years after INL, congressional, state and local officials broke ground on the Center for Advanced Energy Studies, they gathered again to celebrate its completion.

More than 100 people attended the Feb. 20 dedication of the 55,000-square-foot building along the banks of the Snake River in Idaho Falls. They toured the labs, learned about CAES' research initiatives and listened to Gov. C.L. "Butch" Otter, the Idaho congressional delegation and other dignitaries.

All who spoke during the hour long program hailed it as a landmark day for Idaho and the country and as another step toward America achieving energy independence.

"There is no doubt that over the next two or three decades the most important issue facing America in our quality of life and the American economy is going to be the availability and cost of energy," said Sen. Jim Risch, R-Idaho. "Idaho is uniquely positioned to lead the country in the search for better and cheaper forms of energy. I have every confidence that Idaho and this facility will lead the way."

The dedication took place exactly two years after ground was broken for CAES. And to many, it was the culmination of an idea first conceived five years ago by the Department of Energy's Office of Nuclear Energy.

Bill Magwood, former director of DOE's nuclear energy office, and others envisioned a center that would promote energy research, address the shortage of workers in the nuclear field and help universities collaborate with Idaho National Laboratory, its lead nuclear energy research facility.

Rep. Mike Simpson, R-Idaho, said that while construction on the CAES building started in 2007, the concept of a collaborative research center was years in the making.

He recalled discussing the idea with DOE and other members of Idaho's congressional delegation before the INL contract was rebid in 2004.

"One of the visions we had collectively, I believe, was 'how do we integrate the great universities we have in this state with private industry, with the federal

government and with the state government to advance this lab and the energy needs in this country,'" Simpson said during the dedication. "This is the result of those discussions."

CAES has since evolved into a public/private partnership between INL and the state's three public universities – Boise State University, Idaho State University and the University of Idaho. The schools have staff at the Idaho Falls building and also several professors who work with INL - through CAES - on research projects for government and private industry.

While the building has been a major focus, CAES Director Harold Blackman said they've also been busy fulfilling the mission set out by DOE.

CAES' research is focused on nuclear science and engineering, materials

science, bioenergy, carbon management and energy policy. DOE also recently asked CAES to administer its Nuclear Energy University Program, which funds research at U.S. universities and provides scholarships and fellowships to nuclear science students. The federal program also pays for equipment and infrastructure upgrades at universities to improve their ability to conduct nuclear energy research and development.



Missed the CAES building dedication? Don't worry. You can watch a video of the event at www.caesenergy.org.

NEUP-date

Nuclear Energy University Programs (NEUP) funds nuclear energy research and equipment upgrades at U.S. universities and provides scholarships and fellowships to nuclear science and engineering students.

The Department of Energy Office of Nuclear Energy (DOE NE) program is administered by staff located at CAES. It has three funding opportunities – research and development, infrastructure, and scholarships and fellowships. All are in different stages of implementation.

- NEUP received 216 submissions during its recent request for nuclear energy research and development proposals. DOE NE

will announce which proposals are being funded on May 1.

- U.S. colleges and universities have until April 15 to submit an application for a NEUP infrastructure grant through www.fedconnect.net. DOE NE has committed at least \$2.25 million to pay for infrastructure and equipment upgrades.
- NEUP is accepting undergraduate scholarship and graduate fellowship applications from U.S. nuclear science and engineering students through www.caesenergy.org until May 16. DOE NE expects to award approximately 100 scholarships and 15 fellowships during FY 2009.



In CAES you didn't know...

CAES recently co-sponsored the first Energy Policy Institute Summit in Boise to help spark a dialogue about Idaho's energy needs.

Idaho National Laboratory Director John Grossenbacher was the keynote speaker on the first day and several other people, including me, also spoke and provided perspective.

On the second day, researchers from the four CAES institutions – Boise State University, Idaho State University, University of Idaho and INL – brainstormed several projects, including developing a methodology for analyzing energy options and surveying the public to evaluate its perception of the risks of various energy sources. The working group produced 7 policy-related proposals for consideration for CAES funding.

Such events are an important aspect of CAES' mission. In order for us to develop sound policy strategies, we must fully understand the complexity of our energy challenges. As our understanding evolves, we will continue to bring together researchers, industry and government agencies to find solutions to these problems.

The EPI Summit provided valuable insights from many perspectives. Now, it's up to us to make sure we move on from here.

Harold Blackman
CAES Director

Did you know?

The INL Research Library operates a branch at CAES. The library, located on the second floor of the CAES building, contains more than 300 volumes, including science journals and books. Librarians staff the branch several mornings a week to help CAES-based researchers find articles and provide any other support. Eventually, the library will have a self-checkout system.

"We stocked the library based on the research being conducted at CAES," said Sandra Biermann, head of strategic planning and technology enhancement for the library. "We really want to be able to provide (researchers) with whatever they need."

CAES gets \$2.5 million for new equipment

INL Communications

When Congress passed its \$410 billion catch-all spending bill last month, the Center for Advanced Energy Studies was one of the Idaho entities to benefit.

The omnibus bill contained \$2.5 million for new equipment for CAES, a partnership between Idaho National Laboratory and the state of Idaho through its three largest colleges – Boise State University, Idaho State University and the University of Idaho.

CAES Director Harold Blackman said the money will help outfit the building's labs, based upon the center's strategic plan.

The equipment they buy, he said, will directly support CAES' research initiatives of nuclear science and engineering, materials science, bioenergy, carbon management and advanced modeling and simulation.

"This money will provide cutting-edge equipment for the CAES, which will increase our effectiveness in both research and education," Blackman said. "All three Idaho universities will benefit from this equipment. It will provide their graduate students the opportunity to conduct research on state-of-the-art equipment."

Rep. Mike Simpson, R-Idaho, and Sen. Mike Crapo, R-Idaho, both worked to ensure the bill included funding for new equipment for CAES.

John Revier, Simpson's deputy chief of staff, said the congressman has always been a strong proponent of CAES and felt the money would help strengthen its program.

"We want to make sure CAES succeeds and that it is a world-class institution and program," he said.

Crapo said CAES needs cutting-edge equipment if it is to conduct high-level energy research and fulfill its mission.

"Now that the CAES facility is open for business it is essential that we provide the scientists, engineers and students working there with the latest state-of-the-art equipment to match their surroundings," he said. "These funds will allow CAES to purchase that equipment and provide the three Idaho universities working with the INL the tools to solve the energy challenges of the future."

Blackman said he appreciates the strong continued support that Crapo, Simpson and other members of the Idaho congressional delegation have provided.

"Their commitment is making a critical difference for the development of CAES and ultimately the benefit to the state and to the nation," he said.

To submit story ideas, calendar items or other information for upcoming CAES newsletters, please send an e-mail to Kortny.Rolston@inl.gov.