TRADE: FOREIGN AFFAIRS HOLDS CA HEARING ON EXPORT CONTROLS

The House Foreign Affairs Committee, chaired by Rep. Howard Berman (North Hollywood) held a hearing on January 15, 2010 in Palo Alto, CA on “The Impact of U.S. Export Controls on National Security, Science and Technological Leadership.” Other California representatives in attendance were: Reps. Zoe Lofgren (San Jose) and Anna Eshoo (Palo Alto). Witnesses were: John L. Hennessy, Ph.D., President, Stanford University, and co-chair of the National Academies’ Committee on Science, Security and Prosperity; William C. Potter, Ph.D., Director, James Martin Center for Nonproliferation Studies, Monterey Institute of International Studies; and Ms. Karen Murphy, Senior Director, Trade, Applied Materials, Inc.

During his opening remarks, Rep. Berman explained that export controls are used by the federal government to restrict the international transfer of dual use technologies – those that have legitimate civilian uses but also can be used for military purposes. He noted that there is a growing consensus the current system of export controls needs to be updated in order to continue protecting sensitive technologies while also maintaining U.S. technological leadership. He pointed out the complexities involved in complying with the current system and the phenomenal growth rate in applications and approvals of licenses -- twenty-one thousand licenses were issued in 2008, double the number from 10 years ago. Berman concluded that the purpose of the hearing was to help the Foreign Affairs Committee prepare for a complete revision of the current dual-use technology licensing and control system, and also contribute to congressional oversight of the export control policy review that President Obama has ordered, and that is now under way.

Dr. Hennessy argued that for the United States to remain a leader in science and technology, it will have to “fully participate in the international research community. To do so requires that unclassified information be able to flow among researchers and industry leaders in the various fields,
and it requires the United States to continue to attract the best and brightest minds from around the world to work in our laboratories.” He gave specific examples were export controls have hampered Stanford’s research, including a case where a professor working on a vaccine stopped his research because an organism important to his research was designated as a Select Agent, after passage of the USA Patriot Act, requiring greatly enhanced security and background checks on lab personnel. He argued that the goal should be to design national security controls without negatively impacting Stanford’s ability to conduct fundamental research that can benefit the United States economically and militarily. The growing trend to label fundamental research as “Sensitive But Unclassified,” he said, “is a deep concern, since it would further blur the lines between controlled and uncontrolled research in an unpredictable fashion.”

Dr. Potter testified that while endorsing the revision of U.S. export control laws, “it is essential, however, to guard against changes in those U.S. export controls that have served us well in curbing the spread of WMD and whose abandonment might inadvertently contribute to the proliferation of nuclear, chemical, or biological weapons. Therefore, in thinking about where possible reform of export control regulations should be pursued, it may make sense to distinguish between export controls targeting WMD-relevant items (especially those in the nuclear sector where technological change has been less dynamic) and those directed at the much larger body of dual-use strategic goods unrelated to WMD.”

Ms. Murphy explained that “Applied Materials creates and commercializes the technology that helps produce virtually every semiconductor chip and flat panel display in the world.” She strongly supported revision of the current 30 year old export control system, arguing that the ability of China and other nations to move more quickly in global markets because they do not face the same export control requirements hurts the competitiveness of U.S. technology companies.

She offered some basic principles to guide the development of a new system, noting that they have been developed by consensus through industry working groups. They are:

- Both U.S. national security and economic competitiveness depend on a strong, technologically advanced industrial base
- R&D and technological innovation are now global in nature
- Control mechanisms must be cognizant of and keep pace with advances in technologies
- Control regimes should be premised on a cooperative effort between government and industry
- Export controls should be multilateral
- The export controls process should be clear and simple, from its policy foundations to its execution and review.

For further information on the hearing, go to: http://www.foreignaffairs.house.gov.
EDUCATION: WITNESSES ENCOURAGE COMMITTEE TO CONTINUE AND EXPAND AMERICA COMPETES

On January 20, 2010, the House Science and Technology Committee held a hearing titled “America COMPETES (Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science): Big Picture Perspectives on the Need for Innovation, Investment in R&D and a Commitment to STEM (Science, Technology, Engineering and Mathematics) Education.” The hearing focused on the reauthorization of the America COMPETES Act, which funds math and science research and education programs. Specifically, the hearing examined the roles that science and technology play in promoting economic security and maintaining U.S. competitiveness in the 21st century global marketplace.

The America COMPETES Act, enacted in 2007, grew out of the National Academies’ 2005 report Rising Above the Gathering Storm. The report showed “a bleak future -- a stagnating U.S. economy, an ill-equipped educational system, and the U.S. losing its place as a scientific world leader -- and offered recommendations to prevent that from coming to pass,” according to the Committee.

Witnesses, who included: Mr. John Castellani - President, Business Roundtable; Mr. Tom Donohue - President, U.S. Chamber of Commerce; Governor John Engler - President, National Association of Manufacturers; and Ms. Deborah Wince-Smith – President and CEO, Council on Competitiveness, voiced strong support for continuing and expanding public-private partnerships. Witnesses were supportive of COMPETES as a tool for “promoting innovation and ensuring American competitiveness in the global economy.”

Members also discussed ways the private sector can strengthen U.S. competitiveness in the reauthorization of COMPETES. Chairman Bart Gordon (TN) announced the America COMPETES Act will be a significant part of the Committee’s agenda for 2010.

“The U.S. Chamber of Commerce and the business community it represents strongly support reauthorization of the America COMPETES Act,” said Mr. Donohue. “The America COMPETES Act puts the focus right where it should be -- on increasing the number of American students proficient in STEM and ensuring we have sufficient R&D funding to drive innovation and propel technological progress.”

Witnesses also highlighted provisions of the COMPETES Act that help strengthen innovation in the manufacturing sector: federal funding for basic R&D; ARPA-E; STEM education; and the Hollings Manufacturing Extension Partnership (MEP).

More information can be found by visiting: http://science.house.gov/.

ENVIRONMENT: SECRETARY CHU OUTLINES PRIORITIES, CHALLENGES IN CLIMATE CHANGE RESEARCH AND DEVELOPMENT

On January 21, 2010, the Senate Energy and Natural Resources Committee held a hearing on climate change research and development priorities. The witness was Stephen Chu, Secretary of Energy.

In his remarks, Secretary Chu indicated that he is concerned that not enough focus is being paid to clean energy R&D and highlighted the important role that the government plays in R&D funding, particularly at the “front end,” and when private investments, which don’t always “recoup the full value of the shared social good” and under-invest, don’t meet societal needs.

Chu indicated that in working with the United States’ National Laboratories, the “DOE is directing bright people to accelerate energy breakthroughs.” He outlined the following programs: 1) Energy Frontier Research Centers, which are aimed at “scientific collaborations focused on overcoming known hurdles in basic science;” Advanced Research Projects Agency-Energy (ARPA-E), which are an “entrepreneurial funding model to explore potentially transformative technologies…too risky for
industry to fund;” and Energy Innovation Hubs, which are large, integrated teams to solve technology challenges that are expected to begin work in 2010, and be fully operational by 2011. The Energy Innovation Hubs will be designed to do basic research to engineering development and to produce ideas to be quickly commercialized. The Hubs will address three energy challenges: 1) Deriving fuel directly from sunlight; 2) Constructing and retrofitting commercial and residential buildings that are vastly more energy efficient; and 3) modeling and simulation technologies to advance nuclear reactors.

Chu also discussed the way the Department is using the Recovery Act funding it received last year, pointing to their efforts to: use bio-fuels from waste and non-food crops; make more advanced auto batteries; make PV less expensive; design computer tools for buildings that reduce energy consumption; and develop large scale energy storage.

More information on the DOE’s programs and activities and information about the hearing can be found http://energy.senate.gov/.

ENVIRONMENT: EPA PROPOSES STRICTEST SMOG STANDARDS TO DATE

The United States Environmental Protection Agency, on January 7, 2010, proposed the strictest health standards to date for smog. The agency is proposing to replace the standards set by the Bush Administration, which were implemented in March 2008. Prior to reaching its decision, EPA conducted a review that included over 1,700 scientific studies and public comments from the 2008 rulemaking process.

The proposed standards would set a primary standard for ground-level ozone of 0.060 to 0.070 parts per million (ppm) measured over eight hours. The standards would be phased in over the next two decades and areas with the worst pollution (Southern & Central California included) would have more time to comply. The EPA is also considering promulgating secondary, seasonal smog standards to protect plants and trees.

The EPA estimates that the standards will cost $19-90 billion by 2020. Manufactures, refineries and utilities are expected to be the hardest hit, but estimates show that the implementation of the standards would offset health costs by $13-100 billion, and could save 12,000 people from dying of premature death from heart and lung disease, according to the EPA.

Noncompliance would include fines. Opponents of the proposed standards indicate that stricter standards will be difficult and expensive to implement.

EPA will be taking public comments for 60 days and it is hosting three public hearings on the proposal, including one on February 4, 2010 in Sacramento.

More information can be found at: http://www.epa.gov.

RESOURCES: FEINSTEIN PROPOSES MOJAVE DESERT NATIONAL MONUMENT; IMPEDES SOLAR DEVELOPMENT

Senator Dianne Feinstein, the chair of the subcommittee that oversees the budget of the Interior Department, introduced legislation on December 21, 2009 to create two new monuments in the Mojave Desert: 941,000 acres for the Mojave Trails National Monument and 134,000 acres for the Sand to Snow National Monument. The bill is intended to comply with a decades old treaty in which the government promised to create Mojave National Monument and protect desert land donated by the Catellus Development Corporation.

The proposed legislation, however, would also impact 13 large solar and wind plans that are currently planned for the region. Many of the affected developers have already postponed or abandoned their development plans. Tessera Solar, a Houston company, has changed its plans to develop more than 5,000 acres; BrightSource, a California solar developer, dropped its plans to build a 500 MW solar
thermal plant; and Striling Energy Systems scrapped a project that would have fallen in the proposed Mojave Trails National Monument. Power lines will also be rerouted to avoid the proposed monument.

Critics of the legislation argue that the bill will make it harder for California utilities to achieve the goal of providing one-third of electricity needs from renewable sources by 2020, and has increased tensions between advocates of preservation and advocates of energy development. Feinstein attempted to ease these concerns by changing the legislation to: include a 30% tax credit to developers that “consolidate degraded land for solar projects;” reduce the monument area from 2.5 million acres to 1 million acres, allowing at least two of the proposed energy projects to proceed; and include provisions to accelerate approval of renewable energy projects on federal land.

More information can be found at: http://feinstein.senate.gov/.

RESOURCES: INTERIOR MOVES FORWARD ON DELTA WATER PROJECT

The U.S. Interior Department’s Bureau of Reclamation signed the Record of Decision on December 29, 2009 for the Delta-Mendota Canal (DMC)/California Aqueduct (CA) Intertie (Intertie), completing the Federal environmental documentation process.

The ROD sets out Reclamation’s decision to proceed with implementation of the proposed action as identified in the Final Environmental Impact Statement. The project is named in the recent Interim Federal Action Plan for the California Bay-Delta as a high priority action to encourage the smarter supply and use of Bay-Delta water.

The Intertie is designed to connect the DMC and the CA via a new pipeline and pumping plant to improve DMC conveyance limitations, allow for maintenance and repair activities, and provide the flexibility to respond to the Central Valley Project and the State Water Project emergency water operations. The project was identified as a proposed action in the August 2000 CALFED Bay-Delta Program Programmatic Record of Decision.


REPORT: TEACHING CENTER/CSU/UC EXAMINE STATUS OF TEACHING PROFESSION

The Center for the Future of Teaching and Learning, joined by the California State University, University of California, Office of the President, and WestEd, has released its 2009 report, “Teaching and California’s Future - The Status of the Teaching Profession 2009.” The report’s research was conducted by SRI International.

The authors conducted a multimethod study that included a statewide survey, a review of current policies and practices, in-depth case studies, and analysis of secondary data sources. The report examines the highschool teacher workforce in California and the efforts of high schools to redesign the state’s high schools for the 21st Century. It then analyzes the knowledge, skills, and understandings needed for teaching in redesigned high schools, as well as the teacher development system, and school leadership.

The report concludes by making three broad recommendations with specific recommendations within each category. The broad recommendations are:

- Build a statewide teacher development system that is better aligned with the needs of high schools that are making a concerted effort to prepare students for success in college, participation in civic life, and the 21st century workforce;
- Build a structure of support for local school and district efforts to match curriculum and instruction to post secondary 21st century demands; and
- Escalate current efforts to provide equitable access to high-quality instructional programs in order to address the learning gap and ensure each and every student is fully prepared to succeed beyond high school.

For more information, go to: http://www.cftl.org.

REPORT: PPIC REPORT ADDRESSES CALIFORNIA WATER MYTHS

The Public Policy Institute of California released a report in December 2009 entitled “California Water Myths.” The report was authored by Ellen Hanak, Jay Lund, Ariel Dinar, Brian Gray, Richard Howitt, Jeffrey Mount, Peter Moyle, and Barton “Buzz” Thompson. The authors begin with the assumption that “broad public policy and planning discussions about water often involve a variety of misperceptions—or myths—about how the system works and the options available for improving its performance.”

The report then identifies eight water “myths,” involving water supply, ecosystems, and the legal and political aspects of governing California’s water system, discusses how the myth drives debate, debunks the myth, and presents recommendations for public policy debate untainted by the myth. For example, the authors posit as a myth that California is running out of water and that alarming notion encourages a “simplistic and sometimes counterproductive attitude toward solving” California’s water problems. They then proffer that, while California’s water supply is limited, it has always been scarce and the state has, and will continue, to adapt by increasing water use efficiency and the like. They then conclude with the recommendation that “public education can help Californians realize that they reside in an arid region. With continued attention and adaptation, California will have sufficient water resources to sustain prosperous social and economic development into the indefinite future.”

To view the full report, go to: http://www.ppic.org.

REPORT: BAY AREA’S CONNECTIONS TO INDIA ARE UNIQUE, SAYS ECONOMIC INSTITUTE

In December of 2009, the Bay Area Council Economic Institute released a new publication on the Bay Area’s ties with India. “Global Reach: The San Francisco Bay Area’s Emerging Ties with India” is the product of two years of research and nearly 200 interviews with business and other leaders. The report documents the business, institutional and human ties that link the Bay Area with the world’s fastest-growing major economy after China – India. It finds that the region’s connections to India are unique in the United States and perhaps the world, offer a strong base for access to a major emerging market, and provide a competitive advantage for Bay Area companies as they expand globally. It also identifies issues for the future and will serve as the basis for a range of business and policy initiatives in 2010 and beyond. The report highlights that while the Bay Area should “for the foreseeable future retain its role as the world’s leading center for technology innovation, India’s growing prowess in process innovation is redefining its role as a global partner.” Major report findings indicate that:

- A troubled primary and secondary education system is not attracting qualified teachers or producing a critical mass of students grounded in science, math, technology, and business;
- U.S. visa policy is not designed to attract top foreign students and researchers and discourages them from staying after they complete their studies;
- “Buy America” provisions of the 2009 federal stimulus bill restrict the hiring of foreign nationals, which limits the access of U.S. companies to the best global talent and removes job opportunities for foreign-born graduates of U.S. universities;
- The division of labor between Silicon Valley innovation and lower-end support work done in India and elsewhere is blurring, as India becomes increasingly central to companies’ global strategies and tech-related work, and as India’s contributions are increasingly integrated into companies’ global strategies;
- Labor standards on the books in California – including threshold wage levels for software programmers set during the tech bubble that trigger overtime, vacation time, and other mandates and were
specifically aimed at Indian BPO firms – invite frivolous lawsuits and diminish tech job opportunities across the board.

Policy perspectives and suggestions focused on: increased emphasis on math and science in primary and secondary education; high school level and college level business courses emphasizing entrepreneurship and global economics alongside traditional economics and management; immigration reform to develop a J-1/L-1 visa program that allows graduate professionals and researchers to take jobs and contribute to the economy without first returning home; development of state, federal and local strategies to bring clean technology solutions to market, build competitive companies, and strengthen the critical mass of clean-tech activity in California; and development of R&D, investment, and export opportunities to address India’s growing renewable energy, energy efficiency, and green urban design markets.

More information about the findings and report details can be found at: http://www.bayeconfor.org

REPORT: ECONOMIC INSTITUTE RELEASES THE BAY AREA ECONOMIC FORECAST, 2009–2010

In November of 2009, the Bay Area Council Economic Institute released the Bay Area Economic Forecast, 2009–2010. The highlights of the forecast include:

- Unemployment in the Bay Area will peak in the fourth quarter of 2009, reaching a rate of 10.8% and will be highest in the South Bay at 11.9% and lowest in the San Francisco area at 9.4%;
- Nonfarm employment will recover earliest in the East Bay, in the second quarter of 2010, and latest in the North Bay, in mid-2011. Nonfarm employment declines will total 7.3% in the East Bay, 8.6% in San Francisco, 7.7% in the South Bay, and 9.5% in the North Bay, peak to trough.
- Home prices have already bottomed out in all areas except the South Bay, though there will be slight declines over the next two quarters before full recovery begins; the greatest decline has been in Contra Costa County (65%) in the East Bay, the smallest has been in San Francisco (22%).
- Commercial real estate has been in decline, starting early in 2007, across all areas. Rents are falling, vacancy rates are increasing, and net absorption is negative. On a positive note, cap rates, a measure of profitability, are increasing.
- Taxable sales are expected to decline an additional 3.6%, through the second quarter of 2010, bringing overall declines to 22.1%.