

EARTHQUAKE ENGINEERING RESEARCH INSTITUTE NEWSLETTER

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EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

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News of the Institute

2009 Annual Meeting Highlights

For three days in February, nearly 350 attendees (including students) enjoyed the 61st EERI Annual Meeting in Salt Lake City, taking advantage of opportunities to learn, engage colleagues, and increase their awareness of EERI activities. It was the first Annual Meeting to be jointly held with the Western States Seismic Policy Council. Technical sessions explored many aspects of risk reduction and discussed key barriers and incentives for voluntary action to enhance seismic safety. Sessions featured a number of programs and projects that have proven effective. Utah's State Capitol Seismic Retrofit Project received an EERI Special Recognition Award, accepted on Thursday morning, February 12, by Salt Lake City Mayor Ralph Becker Jr., David Hart of the Capitol Preservation Board, and representatives from the two engineering firms involved in the project, Reaveley Engineers of Salt Lake City and Forell/Elsesser Engineers of San Francisco, California.

**Annual Meeting photos by Marshall Lew
unless otherwise noted.**

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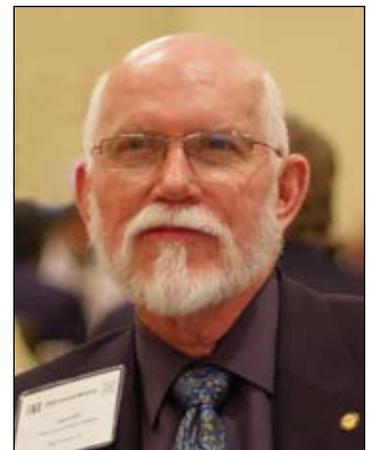


Participants in the 18 teams that vied for honors in the 6th Undergraduate Seismic Design Competition held during the Annual Meeting (photo: Anne Lemnitzer).

Lloyd Cluff Receives Housner Medal

At EERI's Annual Meeting, EERI Past President and Honorary Member Lloyd S. Cluff, director of the Geosciences Department of the Pacific Gas and Electric Company in San Francisco, was awarded EERI's highest honor, the George W. Housner Medal, in recognition of his sustained work in the application of geologic knowledge to critical facility and building safety, his support of effective public policies to reduce earthquake risk and hazards throughout the world, and for his service to the Institute.

In a letter to EERI upon receiving the award, Lloyd wrote, "I am deeply honored and grateful for this distinction...I especially appreciate receiving this honor in Salt Lake City, because Utah is my home state. While I was attending the University of Utah, I was introduced to the Wasatch fault, and investigated my first destructive earthquake, the 1959 Hebgen Lake earthquake; these two factors caused me to get hooked on active faults and earthquakes. I was honored to work first with Professor Housner following the 1964 Alaska earthquake, and again during the EERI Learning from Earthquakes investigations of the



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Lloyd S. Cluff

Annual Meeting Highlights

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EERI members can access the PowerPoint presentations of most of the speakers by visiting www.eeri.org, clicking on member's access, logging in, scrolling down to "Online Presentations," and clicking on 2009 EERI Annual Meeting.

Awards: During Thursday's Awards Luncheon, EERI President Farzad Naeim bestowed the George Housner Medal on Lloyd Cluff of the Pacific Gas & Electric Company (see page 1). Honorary Memberships in EERI went to EERI Executive Direc-

tor Susan K. Tubbesing and T. Leslie Youd, Professor Emeritus at Brigham Young University (see page 12). The 2007 Outstanding *Earthquake Spectra* Paper Award was presented by Naeim to the authors of "Update to ASCE/SEI 41 Concrete Provisions," published in the August issue of volume 23. The winning entry in EERI's Second Annual Graphics Competition was an animation of a retrofit design of a building by Tipping Mar & Associates of Berkeley, California, presented by Arzhang Alimoradi, chair of the EERI Younger Members Committee. The Earthquake Safety Foundation's Alfred E. Alquist Award

was presented by Marshall Lew, an ESF board member, to Lori Dengler, Professor of Geology at Humboldt State University, for Outstanding Achievement in Earthquake Safety. Norman Abrahamson, Senior Engineering Seismologist at PG&E, delivered the 2009 EERI Distinguished Lecture on "The State of Practice of Seismic Hazard Analysis: From the Good to the Bad" (see below).

Reports: Friday's Annual Business Luncheon included annual reports by President Naeim and Treasurer Marshall Lew (see page 6). Naeim

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Abrahamson Gives 2009 Distinguished Lecture



Norman A. Abrahamson

Norman A. Abrahamson, senior engineering seismologist in the Geosciences Department at Pacific Gas and Electric Company in San Francisco, delivered the 2009 Distinguished Lecture, "The State of the Practice of Seismic Hazard Analysis: From the Good to the Bad," for the first time on February 12 during the Annual Meeting.

Abrahamson reviewed the state of the practice of seismic hazard analysis and development of design time histories. He observed that the practice of seismic hazard analysis varies tremendously from poor to very good. The large variability in practice is not simply a reflection of proj-

ect budgets, as a large variation exists for projects of similar scale. Although the basic methodology for seismic hazard analysis has been well established, there remains widespread misunderstanding of the basic concepts, which contributes to poor practice. Abrahamson described some of the most common misunderstandings and common aspects of bad practice, and summarized the aspects of good practice that should be expected for low-end and high-end studies.

For the development of design time histories, Abrahamson indicated that the state of practice is more variable than for seismic hazard analysis. Key aspects such as how representative time histories are selected and how they are modified (by scaling or by spectral matching) vary tremendously based on the opinions of the project participants or reviewers. In most cases, these opinions are based on "comfort" level rather than objective technical criteria. Abrahamson showed examples that illustrate the large range of quality of current practice. He stated that the state of practice for developing time histories will not improve until objective quantitative criteria are

developed to judge the appropriateness of the nonstationary aspects of the proposed time histories for the particular project.

For background information about Abrahamson, see page 1 of the January 2009 *Newsletter*. Groups who wish to invite him to present the lecture should contact Abrahamson directly at NAA2@pge.com.

9NCEE Abstracts Due This Month

March 31 is the abstract deadline for the 9th U.S. National and 10th Canadian Conference on Earthquake Engineering (9USN/10CAEE), with the theme of "Reaching Beyond Borders." Abstracts should be submitted to the conference web page, <http://2010eqconf.org/>.

The conference will be held July 25-29, 2010, in Toronto, Canada, and will bring together professionals from a broad range of disciplines, including architecture, structural engineering, seismology, geology, geophysics, geotechnical engineering, societal response, regional planning, emergency response planning, and regulation. The conference will be held at the Westin Harbour Castle Hotel in Toronto.

Annual Meeting Highlights

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challenged the audience to imagine

and work toward a vision of increasing EERI membership not by just hundreds but rather thousands. John Masek of Value Innovation Engineering Consultants made a presentation about his Nonstructural Elements Study funded by EERI's Special Projects and Initiatives Committee.

WSSPC Awards: On Friday evening, the 2009 WSSPC Awards in Excellence were conferred on five programs aimed at reducing tsunami and seismic risk in Alaska, California, Washington, and Utah. John Parrish, California State Geologist and WSSPC

Chairman, noted "The awards have been an effective method for sharing model programs and products throughout the western U.S..." Information on all the Awards in Excellence is available at <http://www.wsspc.org/Awards/2009>.

Joyner Lecture: After Saturday's lunch, Robin McGuire, founder of Risk Engineering of Boulder, Colorado, discussed "Earthquakes, Seismic Hazard, and Performance-Based Design" in this year's prestigious Joyner Memorial Lecture.

Seismic Design Competition: The Meet the Mentors Reception and two poster sessions offered opportunities for members to meet future leaders of the earthquake profes-

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(l-r): David Hart and Ralph Becker accept a Special Recognition Award for the Utah State Capitol retrofit from EERI President Farzad Naeim.



Subscribing Members on display during the Meet the Mentors Reception.

Housner Medal to Cluff

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1967 Caracas earthquake, as well as many subsequent earthquakes. I am deeply grateful to other EERI mentors: Clarence Allen, Karl Steinbrugge, Henry Degenkolb, Harry Seed, and Frank McClure, who have all played a significant role in my career."

Lloyd presently directs PG&E's Earthquake Risk Management Program. Prior to joining PG&E in 1985, Lloyd was vice president, principal geologist, and director of Woodward-Clyde Consultants for 25 years. He has been a consultant to the U.S. Atomic Energy Commission. In 1975, the President's Office of Science

and Technology Policy appointed him a member of the Newmark-Stever Panel, whose work was the basis for the National Earthquake Hazards Reduction Program. He was a commissioner on the California Seismic Safety Commission for almost 15 years, serving as Chairman for two terms. He was a member of the U.S. Nuclear Regulatory Commission's Senior Seismic Hazard Analysis Committee from 1993 to 1996.

Lloyd has had numerous opportunities to assist international governments. In 2000, he was honored to be a member of the National Interacademies' US/Iran Cooperative Initiative, sponsored by the State Department to normalize relations between the U.S. and Iran through

scientific, engineering, and medical cooperative projects. He currently is a member of the Seismic Safety Advisory Board for the Autoridad del Canal de Panama.

Lloyd served as EERI president from 1993-95. He has been president of the Seismological Society of America and the Association of Engineering Geologists. He was elected a member of the National Academy of Engineering in 1978 and a Fellow in the California Academy of Sciences in 1992. Other awards he has received include the Alfred E. Alquist Medal, the John Wesley Powell Award, and the Western States Seismic Policy Council's Award in Excellence for Lifetime Achievement.

Annual Meeting Highlights

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sions — younger professionals and students. In addition, support from Computers and Structures, Degenkolb Engineers, Digitexx, FEMA, Kinemetrics, the Pacific Earthquake Engineering Research (PEER) Center, and Quanser enabled more than 100 students to participate in the 6th Annual Undergraduate Seismic Design Competition, organized by EERI's Student Leadership Council. The best of the next generation of earthquake engineers came from 18 universities throughout the country. They designed, analyzed, and fabricated scale models of a high-rise office building. The competition room was filled to capacity with cheering onlookers — both students and professionals. On Thursday, the students presented their creative and innovative designs during a team presentation session. Shaking was conducted on Friday.

Scoring is based on several factors, in order to reflect the complex decisions involved in the construction of real buildings. Rentable space in the structure provides "income" to the teams, while building weight, footprint and damage from the shaking contribute to the "costs" of the structure. In addition, judges were asked to score the teams on their presentations, posters, and architectural achievements. Three major earthquakes were used to evaluate the performance of the structures, and the team captains were offered the chance to risk destroying their structures by subjecting them to frequency sweeps.

The top three teams were awarded based on their overall performance index, with Cal Poly San Luis Obispo in first, Brigham Young University in second, and Oregon State University taking third place. Two special awards were also given: the Charles Richter Competition Spirit Award was granted to a one-man team from Brigham Young University, and

the Egor Popov Innovative Design Award was given to the University of California Davis. The students acknowledged that the competition was a wonderful learning opportunity. To see a slide set about the competition, visit <http://www.eeri.org/site/content/view/full/453/270/>.

Fields trips: At the end of the meeting, scores of participants took advantage of the opportunity to go on one of the field trips: a tour of the Utah State Capitol seismic retrofit and restoration or a tour of the Wasatch fault that runs through urbanized parts of Salt Lake Valley.

Thanks: EERI extends thanks to organizing committee members Lawrence D. Reaveley (chair), Rick Allis, Walter J. Arabasz, Steven F. Bartlett, Robert Carey, Gary Christenson, Patricia Sutch, and Barry Welliver for their hard work in putting together an excellent and informative program. FEMA funding enabled 19 graduate students from all over the U.S. to attend the meeting.

To view the Annual Meeting Photo Gallery, visit <http://www.eeri.org/site/content/view/full/453/270/>. The April *Newsletter* will have information on the 2007 Outstanding *Earthquake Spectra* Paper Award, the Student Paper Competition, the Shah Prize, the Alquist Award, the Joyner Lecture, a second Special Recognition Award, and the Second Annual Graphics Competition.



(l-r): Les Youd and Susan Tubbesing receive Honorary Membership awards from EERI Pres. Naeim.



Cal Poly's team placed first in the Student Design Competition (photo: Azadeh Alipour).



Chris Duross of the Utah Geological Survey explains the Wasatch fault to field trip participants.

2010: See You in San Francisco

Mark your calendar! The 2010 EERI Annual Meeting will be held February 3-6 at the Parc 55 Hotel, San Francisco, California. Be on the lookout for more information in future newsletters.



PLEASE POST IMMEDIATELY



**EARTHQUAKE ENGINEERING RESEARCH INSTITUTE
2009-2010 EERI/FEMA
GRADUATE FELLOWSHIP IN
EARTHQUAKE HAZARD REDUCTION**

EERI is pleased to announce the availability of a Graduate Fellowship for the 2009-2010 academic year to support one full-time student in a discipline contributing to the science and practice of earthquake hazard mitigation.

The one-year fellowship, underwritten with funds provided by the Federal Emergency Management Agency, is designed to foster the participation of capable individuals in working toward goals and activities of the National Earthquake Hazards Reduction Program.

AWARD

The EERI/FEMA fellowship provides a nine-month stipend of \$12,000 with an additional \$8,000 for tuition, fees, and research expenses.

CRITERIA

Applicants must be enrolled in a graduate degree program at an accredited U.S. college or university and must hold U.S. citizenship or permanent resident status. All applications must include an academic transcript and a statement of educational and career goals.

All application materials must be submitted electronically to EERI, including a letter of nomination from a faculty sponsor at the student's institution and two additional reference letters. They should evaluate the applicant's recent academic performance and the candidate's potential to contribute to the field.

TO APPLY

Candidates may download an application by visiting
<http://www.eeri.org/site/content/view/41/75/>
or request one by e-mailing eeeri@eeeri.org.

**Deadline for submission of all application materials is MAY 18, 2009.
Announcement of the award will be made on JUNE 19, 2009.**

News of the Institute

Treasurer's Report: Fiscal Year 2008

Membership: The overall number of members decreased 3% over the past year. We urge all members to mentor others to become members. Encourage your younger associates to take advantage of the opportunities EERI offers to network with outstanding people in the field.

Value to Members: It is time to think of EERI as your primary membership organization. Compared to other associations, EERI members get a big bang for their bucks—more than double what they pay, as each member received \$549 in direct and indirect benefits in 2008. The value of EERI's journal *Earthquake Spectra* constituted 32.6% of the direct benefits of membership. About 40% of annual dues covers the cost of publishing *Spectra*. The remainder covers general and administrative costs and member services, including the *Roster*, the *Newsletter*, and other publications. Members also benefit from grants provided by FEMA, NSF, and the EERI Endowment Fund.

Budgets for 2008 and 2009: EERI ended 2008 with a small deficit of \$16,000. 2009 is projected to end with a deficit of \$44,000. The Institute needs additional income other than raising dues. Learning from Earthquakes has been less of a national priority in recent years. Perhaps the new administration will help.

Market's impact: The Endowment Fund's investments suffered with the overall stock market performance, although they did better than the S&P 500. The losses are primarily on paper, as preferred stocks and bonds will get back their face value if not sold. All things considered, the Institute is whole and doing well.

Marshall Lew
EERI Secretary/Treasurer

2008 Summary of Revenues and Expenses

Association Revenues (\$1,000s)

Meetings	\$335
Publications	110
Membership and <i>Spectra</i> Dues	627
G & A	20
Other Programs	48
Grants	399

TOTAL REVENUES \$ 1,539

Association Expenses (\$1,000s)

Meetings	\$314
Publications	240
Membership and <i>Spectra</i>	336
G & A	192
Other Programs	74
Grants	399

TOTAL EXPENSES \$1,555

TOTAL REVENUES UNDER EXPENSES (\$16)

Summary of Endowment Fund Balance from Inception to 12/31/08

Net Revenues (\$1,000s)	\$2,519
Net Expenses (\$1,000s)	\$1,511

TOTAL REVENUES OVER EXPENSES (\$1,000s) \$1,008

2008 Direct Benefits of Membership

	2008 Expenses (\$1,000s)	Per Member
General Administration	\$ 192	\$ 91
Membership Services	95	45
Newsletter	49	23
<i>Spectra</i> Journal	196	93
All Other Programs	70	33
TOTAL	\$602	\$285

2008 Indirect Benefits of Membership

	2008 Expenses (\$1,000s)	Per Member
FEMA	\$ 349	\$165
Learning from EQs (NSF)	136	64
Endowment Fund	73	35
TOTAL	\$558	\$264

TOTAL DIRECT & INDIRECT BENEFITS \$1,160 \$549

2008 Membership Report

Individual Members	2008	2007
Regular Members	1,380	1,447
Student Members	125	171
E-Student Members	255	257
Retired Members	63	61
Honorary Members	29	27
Affiliate Members	56	53
SSA	166	128
Young Professional	201	208
SUBTOTAL	2,275	2,352
Institutional Members		
Platinum Subscribing Members	1	0
Gold Subscribing Members	3	3
Silver Subscribing Members	3	4
Bronze Subscribing Members	17	15
Subscribing Members	23	21
Institutional Members	23	28
SUBTOTAL	70	71
TOTAL MEMBERSHIP	2,345	2,423

2009 Budget for Revenues and Expenses**Revenues (\$1,000s)**

Meetings	\$363
Publications	54
Membership and <i>Spectra</i>	655
Endowment Programs	172
Grants	349
Other Programs	36
G & A	2
TOTAL REVENUES	\$1,631

Expenses (\$1,000s)

Meetings	\$344
Publications	153
Membership and <i>Spectra</i>	348
Endowment Programs	172
Grants	349
Other Programs	70
G & A	239
TOTAL EXPENSES	\$1,675

NET REVENUES UNDER EXPENSES **(\$44)**

Call for Abstracts**New Madrid Time-History Conference**

In support of the New Madrid Earthquake Scenario, the EERI New Madrid Chapter is developing a Shlemon Specialty Conference on Advancing New Madrid Region Time-History Determination, to be held June 3–5, 2009, in Memphis, Tennessee, with the support of the U.S. Geological Survey (USGS) and the University of Memphis' Center for Earthquake Research and Information. The conference concerns the most recent research and the methods to develop and use intraplate earthquake time histories, particularly in the central United States.

Abstracts for presentations or posters are due by April 30, 2009. Authors are encouraged to present time histories for different central U.S. regional locations or cities. Intraplate seismicity, attenuation, spectra, and local site conditions pose difficult issues concerning unique central U.S. properties, methodologies, and their accuracies. Areas that play important roles in the development of time histories include local site investigations, hazard studies, regional studies of paleoliquefaction, faulting, tectonic movement and stress fields, velocity models, and engineering seismology. Intraplate time-history issues impact the built environment of power plants, transportation and utility infrastructure, and business development and continuity. There are also implications for worldwide intraplate regions.

Registration and abstract submission information are available at www.aegweb.org. For more information, contact Oliver Boyd (olboyd@usgs.gov) or Greg Hempen (Greg_Hempen@urscorp.com).

News of the Institute

Summary of the Minutes of the Board of Directors Meeting of December 9, 2008

President Thalia Anagnos called the meeting to order at 8:36 a.m. Present were Directors Jon Bray, Laurie Johnson, Marshall Lew, Jack Moehle, Farzad Naeim, Andrew Whittaker, Executive Director Susan Tubbesing, and Publications Manager Eloise Gilland. Directors Ghosh and Nakashima were unable to attend.

Publications/Membership reports:

Sales of publications increased substantially over the past three months due to strong sales of the new monograph, *Soil Liquefaction During Earthquakes*, with total sales of \$11,703. The staff will send an e-mail asking faculty to encourage students to take advantage of e-student or regular student membership and Anagnos will e-mail student chapter faculty advisors urging them to get their students involved in EERI chapter activities.

Committee chair assignments:

James Malley has agreed to chair the Technical Seminars Committee and is working with Ron Mayes on the leadership transition. Anagnos invited Arrietta Chakos to serve as the new chair of the Public Policy Committee. Chakos is interested in making it serve as EERI's liaison to Congress. Bob Olson is rotating off as chair of the Honors Committee, and committee member Tom O'Rourke agreed to serve as chair beginning in February. Craig Comartin replaced O'Rourke as chair of the Development Committee.

Executive Director recruitment:

Anagnos recapped the Board retreat that took place the previous day. Twenty-eight people attended, representing a broad spectrum of ages, disciplines, and geography. Three issues came to the top: multihaz-

ards, expanding membership, and advocacy/enhancing EERI's public profile. There was support for taking deliberate actions to address multihazards. Strategies are needed to engage younger members and retain them as regular members, and to reach beyond EERI's traditional membership base to bring in new members. There was consensus that the criteria for Executive Director candidates should be (1) relevant experience and understanding of the earthquake community, (2) experience leading or managing a complex organization, and (3) interest and experience in development and growing the organizations membership and resources.

Secretary/Treasurer's Report:

Overview of Revenue and Expense Report: Lew observed that the 2008 budget looks okay and that EERI looks financially stable for 2009. Of the \$160,000 in the original LFE grant, roughly half has been spent on field reconnaissance of the May Wenchuan Earthquake. The combined balance sheet for October 31, 2008, showed an opening fund balance of \$191,201. There was \$114,709 in excess revenues over expenses. EERI's total liabilities of \$268,269 combined with the total fund balance of \$305,910 equaled \$574,179. The Endowment Program's opening balance of \$958,404 was reduced by \$278,713, a reflection of the dismal performance of the stock market. Total liabilities in the amount of \$299,169 combined with the total fund balance of \$679,691 equaled \$978,860. The balance of the combined association, endowment, and technical programs equaled \$1,553,039.

Investment report and overview: The Friedman Family Investment Fund is down less than 25%; the Shah Family Innovation Prize account is down approximately 20%, which is better than the overall stock market. The Operating Funds Report showed a balance of \$347,208. The balance in the interest-bearing checking account was \$44,708. The combined

funds in both the General Administrative checking and investment accounts totaled \$391,916. The Endowment Fund balance totaled \$682,716; the Friedman Family Investment Fund totaled \$166,878; and the Shah Family Innovation Prize totaled \$129,266.

Idriss/Boulanger seminar status:

Tubbesing reported that plans are moving ahead to hold four seminars by the authors of *Soil Liquefaction During Earthquakes*, scheduled for March 10, March 12, March 17, and March 19, in Pasadena, St. Louis, San Francisco, and Seattle.

Completion of report on Contributions of Earthquake Engineering:

The Board received copies of the Executive Summary of the *Contributions of Earthquake Engineering to Protecting Communities and Critical Infrastructure from Multihazards*. Tubbesing observed that it will be a valuable tool for Congress. The complete report will be sent to staff of relevant congressional committees, NEHRP agencies, state agencies and EERI Subscribing Members. A pdf version is on the EERI website to download free of charge.

EERI sale of ICC publications:

Tubbesing has contacted ICC to look into reselling ICC publications to EERI members. ICC responded enthusiastically to this idea. The Board suggested that Tubbesing propose a plan of mutual web promotion, whereby EERI would sell ICC publications via the EERI website and ICC would promote and sell EERI publications on their website. Tubbesing will look into this with ICC and report back at the February board meeting.

Concrete Coalition: The Concrete Coalition Steering Committee recently met via a teleconference to assess the progress of the six pilot jurisdictions in establishing inventories of concrete buildings and best methods for data gathering. Staff will ask OES for a six-month extension due to delays with coordinating a large number of volunteers.

PAGER (Prompt Assessment of Global Earthquakes for Response): This project is Phase 3 of collaboration between WHE participants all over the world and USGS PAGER modelers to obtain data from many seismically active countries on their building inventories, vulnerabilities, and occupancy rates. The project was funded at roughly 75% of the original request. This data will feed directly into the PAGER model to enable more rapid estimates of damage and casualties after earthquakes.

Special Projects & Initiatives

Committee Report: Lew reviewed the SPI Committee's recommendations for proposed projects for 2009. Moehle moved that the Board authorize the SPI Committee to grant the full amount of \$25,400 requested for the proposal on construction of safe and hygienic adobe houses, submitted by Marcial Blondet of Peru. The motion passed unanimously.

Honors Committee Report: Tubbesing left the meeting during this discussion at the Board's request. Naeim moved that the Board award Honorary Membership to Susan Tubbesing and T. Leslie Youd. The motion was seconded and passed unanimously. Tubbesing was invited to return to the meeting and was greeted with the congratulations of the Board. On behalf of the Honors Committee, Bray made three motions that the Board approve the following awards: that the George W. Housner Medal go to Lloyd Cluff of PG&E; that Special Recognition Awards go to Ugo Morelli, formerly of FEMA, and the State of Utah, for its seismic retrofit of the State Capitol Building; and that the Bruce Bolt Medal go to Wilfred Iwan, Professor Emeritus at Caltech, as recommended by the joint EERI/COSMOS/SSA Committee. The three motions were seconded and passed unanimously. The Board approved, with one abstention (Moehle), the *Spectra* Editorial board's nomination of "Update to ASCE/SEI 41 Concrete Provisions" by Elwood et al., to receive

the 2007 *Spectra* Outstanding Paper Award.

NGA Seminar status: Moehle reported that Yousef Bozorgnia had revised the NGA Seminar program to reflect the Board's suggestions, and that Technical Seminar Committee co-chairs Malley and Mayes have approved it. Moehle will convey to Bozorgnia the Board's enthusiasm for his outline and urge him to present the series in the spring, in four or five cities.

Joint National Conference update: The Board reviewed the Second Announcement of the 2010 conference. Tubbesing reported that plans continue to move along. She indicated that the proceedings will be issued on a CD, and for the first time, also be hosted online for at least one year after the conference.

2012 Annual Meeting: Tubbesing reported that the proposed NEHRP National Earthquake Conference (NEC) in February 2012 in Memphis, Tennessee, will be in direct conflict with the usual February dates for EERI's Annual Meeting. Tubbesing took part in a conference call with a large group from the New Madrid region, including Greg Hempen, chair of the EERI New Madrid Chapter. The 2012 NEC will commemorate the bicentennial of the 1811-12 New Madrid earthquake swarm. The planning committee wants EERI to be involved in the NEC, as the New Madrid Chapter's earthquake scenario will be the primary focus. The Board directed Tubbesing to inform the planning group that EERI is enthusiastic about integrating the Annual Meeting into the NEC, and would hope to include elements of EERI's Annual Meeting as an engineering track. EERI would plan to hold a separate Business Meeting and possibly contribute the Distinguished Lecturer as one of the plenary speakers. The Student Design Competition could be a special feature of the program. EERI would designate the chair of the 2012 Annual Meeting Committee

to serve as a member of the NEC planning committee.

Alquist Medal: In her capacity as secretary/treasurer of the California Earthquake Safety Foundation, Mary Comerio recently contacted EERI to request that EERI take over the Alquist Medal. It has historically been awarded only to people within California. The Board approved a motion to take over the award in 2010, on the condition that recipients not be limited to Californians. The motion was seconded and passed unanimously.

Anagnos noted that this was her last meeting as EERI President. She expressed appreciation for the contributions of outgoing Board members Jon Bray and Laurie Johnson. The meeting adjourned at 4:45 p.m.

Announcement

Transportation RFP

The Pacific Earthquake Engineering Research Center (PEER) has announced the Request for Proposals for the PEER Transportation Systems Research Program. To download the announcement and a proposal form and to submit proposals online, visit http://peer.berkeley.edu/transportation/request_for_proposals.html. Proposals are due March 20, 2009.

The goal of this research, funded by the state of California, is to reduce the impacts of earthquakes on California's transportation systems, including highways and bridges, port facilities, high-speed rail, and airports. The RFP focuses on four topic areas: ground motion studies for improving performance-based earthquake engineering (PBEE) analysis and design, enhancing the economic and seismic performance of a high-speed rail system, PBEE studies of a next-generation bridge system, and application of advanced technologies to improve bridge performance.

Opportunities

GEM Seeks Secretary General

The Global Earthquake Model (GEM) is a five-year, €35M public-private initiative with the mission of establishing global independent standards for calculating and communicating earthquake risk worldwide (www.globalquakemodel.org). GEM seeks a senior leader for its executive team. Responsibilities include strategic direction, oversight for execution of technical and scientific activities, and ongoing fundraising. The successful candidate will have a record of executive ability at a senior level in a technically driven organization. English language skills for business communications must be impeccable, and fluency in additional languages is preferred. Loca-

tion: Pavia, Italy (part or preferably full-time). Submit letter of interest, qualifications, business writing sample, and 5 references by March 15, 2009, to Saverio Bisoni, at saverio.bisoni@eucentre.it.

Openings at AIR

EERI Subscribing Member AIR Worldwide in Boston, Massachusetts, seeks the following two professionals: (1) a seismologist to join its earthquake team in the Research & Modeling Department, which is developing seismic risk analysis models used to estimate losses, and (2) a hydrologist/ hydraulic engineer to formulate and implement hydrologic modeling in a probabilistic framework and to implement hydrologic modeling over a wide range of spatial and temporal scales. Required: advanced degree in hydrology or related field, expertise in sto-

chastic and catchment hydrology, technical programming skills, and experience in GIS applications. For more information, visit www.air-worldwide.com.

Postdoc/Research Position in Norway

NORSAR, an independent research foundation in Norway, has announced a one-year assignment (with a possibility of extension) for a postdoctoral scientist or a civil engineer with experience in earthquake engineering to conduct research emphasizing seismic hazard, vulnerability, and loss evaluation. The candidate's ability to document and present work and results in writing and orally, and to represent NORSAR internationally, will be essential. For more information, visit <http://www.norsar.no>.

Announcements

Loma Prieta Event

The Pacific Earthquake Engineering Research Center (PEER) is organizing an event commemorating the 20th anniversary of the Loma Prieta Earthquake (co-sponsored by EERI and SEAONC) to be held on October 17, 2009, in San Francisco in conjunction with PEER's 2009 Annual Meeting and the 3rd International Conference on Advances in Experimental Structural Engineering scheduled for October 15-16, 2009. The event will highlight lessons learned, accomplishments in the 20 years since the earthquake, and future initiatives that will continue to make cities and the built environment safer.

Registration Open for TCLEE 2009

The ASCE Technical Council for Lifeline Earthquake Engineering Conference (TCLEE 2009) with the theme "Lifeline Earthquake Engi-

neering in a Multihazard Environment," will be held in Oakland, California, June 29–July 1, 2009. TCLEE 2009 will focus on performance requirements, design, retrofit, analysis, and planning of lifelines subjected to natural and man-made hazards. The conference will include sessions on lifeline interdependencies, sustainable lifelines, lifeline risk reduction project management, multinational financial perspectives, lifeline performance during recent disasters, and lifeline elements of the NEHRP Reauthorization Program. To register, go to www.asce.org/conferences/tclee2009. Save \$100 by registering before May 28!

LA Tall Building Design Conference

The Los Angeles Tall Building Structural Design Council (LATBSDC) Conference on May 8, 2009, co-sponsored by PEER, will showcase new tall building designs and case studies that have been completed using contemporary performance-based seismic design procedures.

Other topics to be covered include design ground motions, low-cycle fatigue, performance-based plastic design, potential collapse vulnerability of buildings, 2009 updates to the LATBSDC Alternative Design Criteria, and an update on latest earthquake engineering design procedures for tall buildings. For more information, visit http://peer.berkeley.edu/events/2008/latbsdc_2009.html.

Call for Papers

Probabilistic Meeting

A call for papers has been issued for the 7th International Probabilistic Workshop, to be held November 25-26, 2009, in Delft, The Netherlands. Abstracts not exceeding 400 words are due May 1. Possible topics include various aspects of structural safety, probabilistic material description, risk assessment for technical and natural hazards, and risk perception. For more information and to submit abstracts, contact Dirk Proske at dirk.proske@boku.ac.at.

CALENDAR

Items that have appeared previously are severely abbreviated. The issue containing the first appearance, or the most informative, is indicated at the entry's end. Items listed for the first time are shown in bold.

2009

MARCH

10. Soil Liquefaction Seminar, Pasadena, CA. Info: www.eeri.org. (2/09)

12. Soil Liquefaction Seminar, St. Louis, MO. Info: www.eeri.org. (2/09)

17. Soil Liquefaction Seminar, San Francisco, CA. Info: www.eeri.org. (2/09)

19. Soil Liquefaction Seminar, Seattle, WA. Info: www.eeri.org. (2/09)

20. 2nd in Khan Lecture Series, Bethlehem, PA. Info: www.lehigh.edu/frkseries (12/08)

20. PEER/Caltrans Seis. Research Seminar, Sacramento, CA. Info: http://peer.berkeley.edu/events/transportation_seminar.html (1/09)

APRIL

8-10. Annual Meeting of the Seismological Society of America, Monterey, CA. Info: <http://www.seismosoc.org/meetings/meetings.html> (7/08)

17. 3rd in Khan Lecture Series, Bethlehem, PA. Info: www.lehigh.edu/frkseries (12/08)

MAY

8. LATBSDC Conference, Los Angeles, CA. See page 10. (3/09)

14. Seminar on Next Generation Attenuation (NGA) Models, Oakland, CA. Info: www.eeri.org (3/09)

19. Seminar on NGA Models, Seattle, WA. Info: www.eeri.org (3/09)

27. Seminar on NGA Models, Salt Lake City, UT. Info: www.eeri.org (3/09)

28. Seminar on NGA Models, Los Angeles, CA. Info: www.eeri.org (3/09)

31-June 3. 11th Canadian Masonry Symp., Toronto, Ontario, Canada. Info: www.canadianmasonry-symposium.org/ (12/08, 2/09)

symposium.org/ (12/08, 2/09)

JUNE

1-3. SEM Annual Conf. & Expo on Experimental and Applied Mechanics, Albuquerque, NM. Info: <http://sem.org/CONF-AC-TOP.asp> (9/08)

3-5. Advancing New Madrid Region Time-History Determination, Shlemon Specialty Conf., Memphis, TN. See page 7. (3/09)

15-17. Int'l Conf. on Performance-Based Design in EQ Geotech Eng., Tokyo, Japan. Info: <http://www.comp.tmu.ac.jp/IS-Tokyo/> (6/08)

21-24. 19th World Conf. on Disaster Mgmt. (WCDM), Toronto, Canada. Info: www.wcdm.org/ (10/08)

22-24. 2nd Int'l Conf. on Computational Methods in Struct. Dynamics and EQ Eng., Rhodes, Greece. Info: www.compdyn2009.org (11/08)

22-25. NEES Annual Meeting, Honolulu, HI. Info: www.cmmi-granteeconference.org (2/09)

22-24. EQ & Tsunami Conf., Istanbul, Turkey. Info: <http://www.imo.org.tr/eqt2009/> (5/08)

28-July 1. TCLEE Conf.: Lifeline EQ Eng. in a Multihazard Environment, Oakland, CA. Info: www.asce.org/tclee2009. See page 10. (8/08, 10/08, 3/09)

AUGUST

13-14. Asian-Pacific Network of Centers for EQ Eng. Research (ANCER) Wksp, Urbana-Champaign, IL. <http://illinois.edu/goto/ANCER> (2/09)

19-21. 2nd Int'l Workshop on Performance, Protection, & Strengthening of Structures under Extreme Loading, Hayama, Japan. Info: www.nda.ac.jp/cc/users/fujikake/protect2009 (12/08)

SEPTEMBER

13-17. 10th Int'l Conf. on Structural Safety & Reliability (ICOSSAR2009), Osaka, Japan. Info: www.sc.kutc.kansai-u.ac.jp/icossar2009 (2/08)

23-26. SEAOC Conv., San Diego, CA. Info: <http://seaoc2009.com/> (2/09)

OCTOBER

2-3. EQ Geotech. Eng. Satellite Conf., Alexandria, Egypt. Info: mamsakr@yahoo.com (12/08)

5-9. 17th Int'l Conf. on Soil Mechanics and Geotech. Eng., Alexandria, Egypt. Info: <http://www.2009icsmge-egypt.org/> (12/08)

15-16. PEER Annual Meeting, San Francisco, CA. See page 10. (3/09)

17. Loma Prieta Anniv. Event, San Francisco, CA. See page 10. (3/09)

NOVEMBER

10-15. 5th Congress on Forensic Engineering, Washington, D.C. Info: <http://content.asce.org/conferences/forensics2009/index.html> (12/08)

25-26. 7th International Probabilistic Workshop, Delft, The Netherlands. See page 10. (3/09)

DECEMBER

9-11. Improving the Seismic Performance of Existing Buildings and Other Structures, San Francisco, CA. Info: www.ATC-SEI.org (12/08)

2010

FEBRUARY

3-6. EERI Annual Meeting, San Francisco, CA. See page 4. (3/09)

MAY

24-29. 5th Int'l Conf. on Recent Advances in Geotech. EQ Eng. & Soil Dynamics and Symp. in Honor of I.M. Idriss, San Diego, CA. Info: 5geoeq-conf2010.mst.edu (4/08, 1/09)

JULY

11-15. 5th Int'l Conf. on Bridge Maintenance, Safety and Mgmt. (IABMAS), Philadelphia, PA. Info: <http://www.iambas2010.org> (11/08)

25-29. 9th U.S. Nat'l & 10th Canadian Conf. on EQ Eng.: Reaching Beyond Borders, Westin Harbour Castle Hotel, Toronto, Canada. Info: 2010eqconf.org. See page 2. (2/08, 7/08, 1/09, 3/09)

AUGUST

30-Sept. 3. 14th European Conf. on EQ Eng. (14ECEEE), Skopje-Ohrid, Macedonia. Info: www.eaee.boun.edu.tr/eaee.htm (12/08)

News of the Institute

Tubbesing and Youd Awarded Honorary Membership

The EERI Board of Directors voted to name Susan K. Tubbesing and T. Leslie Youd as Honorary Members of the Institute. Honorary membership is awarded to recognize members who have made sustained and outstanding contributions either in the field of earthquake engineering or to EERI and the pursuit of its objectives.

Susan Tubbesing was recognized for her outstanding leadership, organizational skills, and professional services to EERI members and the Board of Directors, and to the earthquake and natural hazards community in general, while serving since 1988 as the Institute's first full-time Executive Director. EERI's preeminence as *the* international multidisciplinary forum for earthquake risk reduction is a product of her leadership and stewardship. Because of her excellent relationships with national and international funding agencies, EERI has expanded its activities during her tenure. Susan has been successful in securing funding from the Federal Emergency Management Agency to support EERI publications, programs for

students and young professionals, technical seminars for engineers, and the web-based Mitigation Center. The National Science Foundation supports the exemplary *Learning from Earthquakes Project* for post-earthquake field investigations. She has served as the principal investigator for six US-Japan conferences on urban earthquake hazard reduction and, more recently, two international conferences on urban disaster reduction.

Since 1988, Susan has walked the halls of Congress in support of NEHRP reauthorization; testified at state and national legislative hearings; and served on numerous boards and advisory committees for earthquake engineering centers and organizations throughout the country. Susan's collaborative spirit, keen vision, and good humor have made her an articulate and influential advocate for earthquake loss reduction nationally and internationally. Her achievements were recognized last year when she received the 2008 Alfred E. Alquist Medal for Outstanding Achievement in Earthquake Safety given by the California Earthquake Safety Foundation.

Les Youd was recognized for his important teaching and research on earthquake-induced soil behavior, and his efforts to apply that knowledge to building and critical facility projects. Les is Emeritus Profes-

sor of Civil Engineering at Brigham Young University and is one of the most eminent international researchers on soil liquefaction and ground failure. His best-known papers concern the prediction of the magnitude of lateral spreading.

Les is a past EERI director. He performed post-earthquake investigations following 11 major earthquakes on 4 continents, and led the EERI reconnaissance team that investigated the 1999 Kocaeli, Turkey, earthquake. He chaired the Steering Committee of the 6th International Conference on Seismic Zonation, organized by EERI in 2000. The author of more than 150 publications, Les was named to the National Academy of Engineering in 2005 and was made an honorary member of the American Society of Civil Engineers in 2006. He has been honored with ASCE's 2002 H. Bolton Seed Medal, the Utah Engineering Educator of the Year, the U.S. Department of the Interior's Superior Performance Award, and BYU's Karl G. Maeser Research and Creative Arts Award. Les earned his bachelor's degree in civil engineering from BYU and a doctorate in civil engineering from Iowa State University, and completed post-doctoral studies at Imperial College in London. He served as the first chair of the Utah Seismic Safety Commission from 1994 to 1997.



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