



State of Utah

UTAH SEISMIC SAFETY COMMISSION

Michael O. Leavitt
Governor

T. Leslie Youd
Chairperson

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UTAH SEISMIC SAFETY COMMISSION

January 16, 1996

State Office Building Room 1112

Minutes

Members Present:

Chair, Les Youd
Lee Allison
Walter Arabasz
James Bailey
D. Douglas Bodrero
Lorayne Frank

William E. Juszczak
Suzanne Winters

Professor, BYU Civil Engineering Department
Director, Utah Geological Survey
Director, University of Utah Seismograph Stations
Structural Engineers Association of Utah
Commissioner, Department of Public Safety
Director, Division of Comprehensive Emergency Management
Division of Facilities and Construction Management
Science Advisor, Governor's Office of Planning and Budget

Members Not Present:

Ken Bullock
James Golden

Rep. Peter Knudson
Sen. Craig Peterson
Barry Smith
Randall G. Updike
Russ Wilder

Director, Utah League of Cities and Towns
Assistant Chief Structural Engineer, Department of Transportation
Utah House of Representatives
Utah State Senate
Western Mountain region American Institutes of Architects
U.S. Geological Survey (Ex-Officio)
Federal Emergency Management Agency (Ex-Officio)

CEM Staff Present:

Bob Carey
Don Cobb
Brenda Edwards
John Rokich

EPICENTER Program Manager, Natural Hazards Section
Natural and Technical Hazards Bureau Chief
Office Technician, Natural Hazards Section
Natural Hazards Section Chief

UGS Staff Present:

Gary Christenson
Janine Jarva

Applied Geology Manager, Utah Geological Survey
Senior Geological Technician, Utah Geological Survey

Others Present:

Dr. Stuart Nishenko
Lee Siegel



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Call to Order

Les called the meeting to order at 1:00 p.m.

Review of Minutes

The minutes were approved with corrections. In the October 26, 1995 minutes on page 6 line 37, near bottom of page replace the ? with "to."

Motion:	Approve minutes with corrections
Moved by:	Lorayne Frank
Seconded:	Suzanne Winters
Motion Carried:	By a Quorum

Caucus Presentations

Les began by announcing the Senate caucus presentation on Thursday Jan. 18, 1996, has been rescheduled for Tuesday Jan. 23, 1996 at 12:00. It will be in the State Capitol Room 305 for 10 minutes. Jim Bailey will make the presentation to the Senate in place of Les. Les will be in Japan for the anniversary of the Kobe, Japan earthquake. Les also informed the Commission that Rep. Knudson has scheduled the Commission's presentation to the House Republican caucus for Jan. 18, 1996 at noon for 15 minutes. Les will make the presentation to the House.

Les asked if the presentation should be the same as was made to the Governor. Lee suggested the complete "Strategic Plan" be presented stating that the Commission's top three priorities have been presented to the Governor and pointing out that there is a 20 year plan published with actions that can be taken now. Suzanne commented that the need for a long-term strategic plan, adoption and funding are the points to make in the presentation. Walter suggested the clarity of what the Commission wants, as stated in the presentation to the Governor, be maintained in the presentations to the caucuses.

Les reviewed points that could be presented to the caucuses. Lee suggested the Legislature could formally adopt the "Strategic Plan" as the State's earthquake hazard reduction plan without committing funding, but recognizing the priorities and issues. Then he suggested to present the three goals, high priority items, asking for their support particularly in the strong motion initiative. Les asked for clarification if this would be an action on the Legislature floor. Lee responded that this is for the caucuses' information. Walter asked if the priorities chosen by the Commission, for the Governor to put into his budget, had changed. Les commented that they have not changed. Lee also responded that as an employee of the Governor, it is appropriate to support the Governor's budget decision. The Commission can make another request to the legislature for specific items.

Commissioner Bodrero commented that the need for a plan for the \$200,000 is important. He stated that if there is no plan, the legislature may see this as an unnecessary program and pull the funding. Les requested discussion on a plan. Discussion ensued on the previous \$75,000 one-time funding which was used to purchase seven strong motion instruments. Les commented that a possible use

for the funding would be to purchase an additional 15 instruments, then re-negotiate with USGS to collect and maintain the data. He stated with this increased number of instruments, detection of earthquakes within the Intermountain seismic zone would provide more information on motion to engineers and scientists. Commissioner Bodrero suggested the presentation be made as Les presented his idea to the Commission with the caveat that USGS is cutting back, and the Commission may come back to seek funding for monitoring. Les commented that a state instrumentation program could be developed for interested agencies and they be assisted in monitoring the instruments.

Discussion on Strong Motion Instrumentation

Les suggested a strong statement is essential in support of the \$200,000 dollars for the Strong Motion initiative. He further commented that the \$10 million dollars for the upgrade of state facilities and the \$150,000 for the education initiative are essential. Walter commented that the Governor's budget limits the strong motion initiative due to the one-time appropriation.

Les talked with UDOT and reported they have a high priority in their program relating to instruments on I-15 and bridges. He stated the Federal Highway Administration may participate in instrumenting the bridges in the state. He further stated that UDOT realizes the need to have personnel maintaining the instruments for the program to be effective. UDOT would like the USSC to consider passing a motion to support instrumentation of UDOT bridges.

The Division of Water Rights expressed interest in the dams in the state being instrumented but the dams are not state owned. The Division of Water Rights is supportive of having a state program to maintain the instruments on dams. The Division of Facilities Construction and Management also expressed interest in obtaining instruments. Suzanne commented that to have instruments without personnel is pointless.

Les commented the one-time funding makes it challenging to know what plans to make for the future. He also stated private industries could be part of the instrumentation program given approval from a body like the USSC. Les further stated that he would like to involve private industry in instrumenting some critical facilities. Walter commented that a long-term commitment from the Legislature in dealing with the earthquake issues is important for success.

Commissioner Bodrero asked which agency has this funding. Lee responded that it is in UGS's budget and clarified that the DNR appropriation sub-committee will vote to put it in UGS's budget. He also commented if it remains in the DNR's budget allocation, it should not come up again. He commented that it would come up as a discussion item only, in UGS's budget hearing. Discussion

followed concerning the way the funding for the \$200,000 is written. Lee commented that they are interpreting it to be very broadly written. Les postponed making a motion on the request from UDOT that the bridges be instrumented with their assistance. The strong motion questions raised

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may be deferred to the Geoscience standing committee for clarification. Lee clarified that the state strong motion program is a joint program between University of Utah and UGS. He asked that the budgetary impact be made clear before a motion is made.

Les requested the clarification from the Commission concerning printing notices of Commission meetings in the newspaper. After a short discussion, Lee responded that his staff has the capability and they will make the announcements.

Status of Task Assignments

All Members Review Brochure - Gary responded that it is ready for printing. Lee commented that their graphics staff will add to the front of the cover to make it more appealing.

Lorayne Frank, Lee Allison, Suzanne Winters, and Jim Golden - List of committee members for circulation - Les encouraged Commission members to complete this task. He approved the committee list from Lorayne.

All Standing Committee Acting Chairs - Convene committees and begin work.

Sen. Peterson - Inform Jim Golden that he is acting chair for the Lifelines Committee. Complete

Rep. Knudson - Contact House leadership to set up presentation by USSC. Complete

Lee Allison - Inform Awareness and Education Committee that they are organizing 1996 Earthquake Conference.

Staff - Suggested committee members for Jim Golden. Complete. Jim is calling the members.

- Copies of "Reducing Earthquake Losses". Complete.
- Circulate final lists of committee members. Complete and on-going.
- Contact Senate and House for presentations during legislative session. Complete.
- Finalize brochure. Complete.
- Follow up on NEHRP Coalition participation. They are still considering our participation.

New National Science Foundation (NSF)-funded Lifeline Project

Elliott Mittler of Los Angeles introduced Craig Taylor with EQE in Los Angeles, and LaVal Lund. LaVal is a retired Engineer from Los Angeles Department of Water and Power. He is acting as a consultant for their three year project sponsored by the NSF to chronicle the successes of earthquake mitigation in lifelines. LaVal is responsible for developing the Los Angeles earthquake mitigation program for the water and aqueduct system.

Elliott stated they are looking at Mt. Fuel's lifeline mitigation program and comparing it with the other programs in California and Washington. He commented that one of their goals is to have a good understanding of the process within Mt. Fuel. Then by combining Mt. Fuel's successes with those of other public and private utilities in the United States, they can form generalized models of success and make recommendations for other utility companies.

Craig stated that Mt. Fuel is one of three companies in the country that has completed a very formal decision analysis as part of their mitigation program. He commented that there are different types

of programs with different circumstances, and earthquakes are not always the stimulus for these programs. Les asked if they were interested only in lifeline information. Elliott replied that other information as background is welcome. Les then commented that they may be interested in UDOT's project for rebuilding I-15. Elliott then commented that they are working with CALTRANS and the comparison may be beneficial. Elliott requested copies of reports or documents relating to earthquake mitigation, in lifelines, and in other areas as background.

Information can be sent to: Elliott Mittler, 6121 Shoup Avenue, Unit 30, Woodland Hills, CA 91367. Phone and Fax (818) 703-8429; messages (818) 703-8419. Craig Taylor's address is: EQE International, Lakeshore Towers, 18101 Von Karman Avenue, Suite 400, Irvine, CA 92715-1032. Phone (714) 833-3303; Fax (714) 833-3391.

Discussion on USSC Recommendations in Governor's Budget

Les began by expressing his thoughts concerning the lack of success in the presentation to the Governor and Legislature. He suggested the Commission may need to prepare more to make a presentation, or perhaps the presentation needs more depth. He also suggested the possibility that the committees may need to prepare recommendations, actions, and define issues. Les wanted to know if white papers are needed to assist the Commission in being clear on the issues, programs, and how the programs work. After further discussion Les said that white papers are not what is needed but they would assist him particularly in understanding the education initiative. Suzanne commented that private industry has a strong influence in the legislature. She suggested the Commission involve the leaders of private industries, that have adopted mitigation and implementation procedures in the presentation to the caucuses. Discussion followed on this topic. Les asked who a good contact would be. Suzanne suggested Bob Grow of Geneva Steel be asked to participate. She offered to contact him. Commissioner Bodrero stated there are full-time lobbyists from UP & L, Pacific Corp. and Mt. Fuel and we should make them aware of the Commission's concerns.

Les stated the goal for this year is to protect the \$200,000 and let the Legislature know there is more to be done. Suzanne concurred that the funding needs to be protected. Les suggested that private industry be involved in the Legislative process for next year so they can include mitigation funding in their programs. Commissioner Bodrero suggested an Industry Subcommittee be formed or involve them in the current committees. He commented that industries have a lot of money invested in infrastructure that is vulnerable to seismic activity. He further stated there are a lot of individuals with power that may be able to influence the Legislature.

Les asked if private industry could be incorporated in the annual conference. Commissioner Bodrero commented that the response from industries during the past CEM exercises proves interest in earthquakes, and they could use the annual conference as a forum. Lorayne commented that the membership of the Association of Contingency Planners is from banking and private industry. She stated that the ACP is developing a course to be taught on business resumption for banking, private industry, and also state agencies. Les commented that a broad spectrum of topics be addressed,

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including planning and mitigation. Lee suggested that these recommendations have been addressed in the membership on USSC committees which have a mixed representation of industries. He suggested a key item is the report the staff is preparing, that will show the accomplishments and successes of private industries. He added other industries will see these and realize they can do something.

Les suggested that State agencies improve contact with the next year's Legislature, to bring back the focus on the priority issues. He stated a suggestion he heard in this meeting is working through the standing committee structure. Suzanne again stated the need to secure the \$200,000. A secondary goal should be to plant the seeds of the need for awareness. She stated that at this point in time, private industry is doing more than the government in taking the lead for mitigation.

She further commented after the Legislature is over, the lobbying for the initiatives next year can begin. Walter asked for clarification on the funding for this year and if more should be requested, or if we should start preparing for next year. Suzanne responded that obtaining more funding is not likely. She suggested the Commission encourage the Legislature get involved with their local communities to understand their citizen's seismic concerns. Then to encourage them to implement the "Strategic Plan" for long-term protection of the State's investments. Lee asked for clarification if the legislature should be asked to adopt the "Strategic Plan" this year. Suzanne responded that it should be included.

Ideas for the annual conference and involvement of Committees

Les asked what discussion has taken place in regards to the annual conference. Lee responded that some discussion has taken place but the Earthquake Awareness Committee is not in place. He stated that the other standing committees could be asked to organize a session, including multiple breakout sessions with issues that are important to the committees.

Dr. Stuart Nishenko presentation

Lee introduced Dr. Nishenko who has a new study entitled "Holocene paleoseismicity, temporal clustering and probabilities of future large ($M > 7$) earthquakes on the Wasatch Fault Zone, Utah", that will be published in the "Journal of Geophysical Research." Dr. Nishenko has a Ph.D. from Columbia University in Seismology. He has spent the last thirteen years working with the U.S. Geological Survey in Colorado where he has become one of the worlds leading authorities on determining probabilities of earthquakes. He was a member of the team that successfully forecast the 1989 Loma Prieta earthquake and the 1985 Valparaiso, Chile earthquake. The co-author is Dr. Jim McCalpin, formerly a professor at Utah State University. He now has his own consulting company in Estes Park, Colorado. Dr. Nishenko recently left USGS and has his own research company Natural Disaster Research Inc., that deals with all types of natural disasters. Dr. Nishenko presented his results to the Commission and entertained questions.

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Next meeting

Les commented that the focus of the next meeting will be the annual conference. Les stated that Lee has the support of the commission to go ahead with the preplanning for the conference. The next meeting is scheduled for March 13, 1996 at 9:00 a.m.

Note

Following the Commission meeting, a press conference was held. Dr. Nishenko, and Lee Allison entertained questions concerning the new study from the local television stations.