

COSMOS

Meeting of the Board of Directors

18 November 2010

3:00 PM – 7:30 PM

Clarion Hotel, Millbrae, California

Members of the Board

Present:

W. Iwan

M. Power

D. Levisch

J. Parrish

R. Nigbor

J. Steidl

D. Yule

Absent:

N. Abrahamson

D. Dreger

D. Wells

By Telecon:

W. Savage

Director of Engineering Applications

R. Bachman

Office Manager

Claire Johnson

Guests

C. B. Crouse

A. Shakal

1. Adoption of the Agenda—W. Iwan

The meeting was called to order at 3:05 PM and roll call was taken.

The Minutes from the 4/29/10 Board of Director's meeting were reviewed. Typos in the Minutes were noted. J. Parrish motioned to approve the amended Minutes, seconded by D. Yule. Minutes approved at 3:08 PM.

2. Board of Directors Election Results

C. Johnson reported that out of the 50 ballots mailed, only 20 ballots were returned with one abstention. According to COSMOS' Bylaws, 20 out of 50 ballots constitute a quorum. Donald Wells and Douglas Dreger were elected to the Board of Directors.

3. Board of Directors Officers Election

M. Power nominated Donald Wells to be Treasurer. J. Parrish seconded the nomination. There were no objections and the motion was carried. D. Wells is now the Treasurer. W. Iwan thanked M. Power for his many years of exemplary service as Treasurer.

4. Presidents Report—W. Iwan

The financial commitments of COSMOS's membership has been affected by the current economy. EERI's decided to "swap" memberships, as opposed to their previous commitment of \$5000/year. Although this is an area of concern, it should not affect COSMOS' ability to continue its mission.

C. Johnson reported that the attendance at the next day's Technical Session was 105 registrants (including 12 students), not including walk-ins. Attendees registered early this year, up substantially from last year's attendance numbers. Walk-in usually add 10-20 additional attendees. J. Steidl asked if the Technical Session generated any more COSMOS members? C. Johnson replied no; however, it did tend to encourage those people who were members who had not yet paid their dues to remit their dues with their registration. J. Steidl asked if COSMOS should make the fee structure such that attendees automatically become a member. This is still open for discussion.

W. Iwan thanked the Board members for participation in COSMOS and for serving on the Board of Directors.

6. Annual Business Meeting Agenda—W. Iwan

The Board reviewed the Agenda for the Annual Business Meeting. W. Iwan asked if there should be any changes. There were no changes. M. Power suggested that D. Wells present the Treasurer's Report to the Membership. It was decided to confirm this when D. Wells arrived at the meeting. R. Bachman noted that he will notify the membership at the Annual Meeting that COSMOS' IBC proposal had been approved.

7. Director of Engineering Applications—R. Bachman

R. Bachman outlined the topic for the next day's Technical Session: Applying the conditional mean spectra (CMS) to the selection and scaling of ground motions. As in previous years, the program was designed to examine concerns and issues, and promote innovative concepts to the membership and the profession at large. Y. Hashash is attending as an invited speaker, providing an example of using CMS. J. Moehle has been added to the program to provide a counterpoint to the panel discussion. T. Heaton had wanted to attend and voice his concerns but was unable to attend. The fee structure for this year has been increased so that income and expenses cancel each other out.

As noted earlier, the COSMOS proposal to the IBC has been approved.

R. Bachman gave a report on the COSMOS Strong-Motion Forum in Toronto the previous July. COSMOS had a booth in addition to a Forum meeting. C. Johnson said that there was much more activity at the booth compared to previous EERI-sponsored events. All materials at the booth were distributed. Twenty people attended the Forum. Gleaned from the discussion among the attendees was that COSMOS should examine the standards of other organizations interested in strong-motion recordings and come to a consensus on what is needed. A professor in Indonesia has been tasked by the government to install a strong-motion network and was very interested in the work that COSMOS has done, and further contact would be established. J. Steidl asked if there were a list of attendees at the Forum. C. Johnson was tasked with determining if such a list had been generated.

The PEER 2L04 contract has been extended until June 30, 2011. Due to some financial malfeasance, an unknown person had appropriated a check made out to COSMOS. This is now in the hands of the U.C. police, and a new check will be generated to pay COSMOS.

R. Bachman welcomed Dan Levish of the Bureau of Reclamation to the Board. D. Levish is Jerry Wright's replacement.

Regarding the continued membership of EERI, the previous dues of \$5000/year has now been reduced to \$3000/year. In addition, COSMOS is now a Bronze member of EERI (at \$3000/year), which gives COSMOS free registration at EERI conferences and other amenities. Although this arrangement is a financial wash (with the loss of \$5000/year in income), this allows COSMOS to retain EERI as a visible member of COSMOS.

8. Treasurer's Report—M. Power

Final Financial Report for 2010: As noted in Attachment 1, as of 15 November 2010 the planned loss for 2010 is almost \$60,000.

Membership: Attachment 3 listed the Membership summary. It is expected that there be a \$16,000 shortfall between the actual and budgeted membership income for 2010. California Geological Survey's (CGS) available funding for 2010 was \$13,000, which was partially offset by \$3000 additional funding from the previous year. It is expected that CGS will be able to fund at the usual amount of \$20,000 for the next two years. M. Power reiterated R. Bachman's comments about the EERI dues now reduced to \$3000 with the additional expense of \$3000 for COSMOS' membership in EERI as a Bronze member. COSMOS received \$1000 less in membership dues from PG&E, and there was no payment this year from Digitexx or John Martin & Associates. Individual membership was down slightly. Total membership was expected to be ~\$56,500 for 2010.

Project/Contracts Summary: 2L04 had received no income to date, but had expenses of \$20,600. This should be balanced by the end of the 2010 year, with a small overhead gain of \$2600.

Technical Session 2010: Expenses are down from the previous year, with an increase of income. It is expected that the Technical Session will break even, and, depending on the number of walk-ins, generate a small profit.

General Recap: Expenses were less than budgeted for 2010 because there were no committee expenses. The Gift Account to the University of California, Berkeley, which covers C. Johnson's salary as Office Manager, is paid in advance of \$18,000 (for 2011). This will be liened to 2011 when the ledger is adjusted by the accountants in February 2011. The bottom line is that there is a loss of \$16,000 for FY 2010.

Pending 2011 Budget: There is a preliminary loss budgeted at \$7300. The approval of the 2011 Budget was tabled until after the committee reports.

M. Power thanked C. Johnson for her help in maintaining the books.

9. Discussion of Overhead Analysis

At the 8 February 2010 Finance Committee Meeting it was decided that the COSMOS overhead rate be reviewed as the rate for government contracts is low (~10%). It was determined to evaluate overhead rates for future contracts by documenting actual overhead costs in order to defend higher overhead rates on future contracts. General/Administrative (G&A) expenses (those not directly connected with mission-related activities) needed to be defined and separated from Program services. With assistance from D. Bott (COSMOS' accountant), M. Power and C. Johnson presented their overhead analysis. Based on this analysis, the overhead rate is variable (between 39%-90%) due to the variability of Program Services versus G&A expenses. The Finance Committee noted that this number is far greater than the current 10% rate.

R. Bachman disagreed with how the overhead rate was calculated, and J. Parrish agreed, noting the 90% overhead rate. R. Nigbor noted that the 90% is an upper bound, and that any rate set by the Board of Directors needed to be justified in the event of an audit. R. Bachman said that there were two types of overhead: costs associated with facilitating the program services versus the general G&A expenses running COSMOS. J. Steidl noted that membership income covered much of the G&A expenses for any given year. Based on their analysis of the expenses, C. Johnson and M. Power argued that the point of the analysis was that it put COSMOS in a position to argue for greater overhead rates (more than 10%). R. Nigbor, J. Parrish, and W. Iwan suggested that a 20-30% overhead rate would help to make up the shortfall in the current budget. Continuing losses will affect COSMOS' viability.

J. Parrish moved to adopt a 25% overhead rate on all new contracts as of 18 November 2010. R. Nigbor seconded. New overhead rate will be in effect until 31 December 2011, at which point the issue will be reviewed again.

Discussion ensued on the issue of double overhead rates on projects that come from organizations like PEER that have already paid overhead on federal or state funding, which is then passed down to COSMOS. It was determined to set rate at 25% and then negotiate if this rate isn't acceptable.

Motion was carried. The new COSMOS overhead rate is 25%.

General comment from R. Bachman that the budget deficit should be looked at as not a reflection on the lack of projects, but the dearth of membership funds. C. Johnson noted that projects increase the visibility of the organization, which increase the value added to the membership. She pointed out several worthwhile project spearheaded by C. Stepp that have generated a lot of interest in COSMOS.

10. Future Direction of the Geotechnical VDC—R. Bachman

C. Roblee has written a report on for future management and operations of the GVDC. The critical issue is how the maintenance and operations of the GVDC should be funded. In this report two models were presented: the sponsor model and the fee-based model. M. Power said that C. Roblee is interested in COSMOS taking on the role of manager of maintenance and operations. He suggested that C. Roblee make a presentation at the next board meeting. J. Parrish asked how the GVDC related to COSMOS. J. Steidl noted that geotechnical information from the GVDC can be useful in interpreting strong-motion data when site characterization issues are critical. J. Parrish asked how often such data was used and would it support itself if a fee-based model is used to support it? C. Johnson noted that the previous support to establish DIGGS was done through support from state DOTs and perhaps they should support the finished product. M. Power said that C. Roblee has submitted a 2L04b proposal to PEER, with COSMOS as a key participant. He noted that PEER might be interested in running the GVDC. W. Iwan asked that the Board be presented with a proposal and the Executive Committee will take this under further consideration.

ACTION ITEM: C. Johnson to contact C. Roblee to set up a presentation of his proposal, with an emphasis on COSMOS' participation instead of PEERS?

11. Report of the Vice President and Update on Bruce Bolt Medal—W. Savage

Nominations were received and the EERI/SSA/COSMOS panel met and approved awarded the 2011 Bolt Medal to Kojiro Irikura. Dr. Irikura still needs to determine at which meeting he wants to receive the medal, at which point COSMOS should make the announcement. Dave Boore should be recognized at the Annual Meeting tomorrow as the recipient for the 2010 Bolt Medal.

12. Update on COSMOS Website Upgrade/Maintenance—C. Johnson

The new website is up. COSMOS has re-contracted with Darryl Wong of CUREE to maintain the website. Future considerations are to research the idea of hosting the COSMOS website some place other than U.C. Santa Barbara because of the age of the hardware and lack of systems administrator to manage the existing hardware.

13. Update on 2009 Technical Session Proceedings Project —C. Johnson

This is finished and up on the website.

14. Report on Status of CESMD—J. Parrish and A. Shakal

Advisory Committee Report: J. Parrish reported that the CESMD is more and more automated, with data automatically being updated and loaded onto the database. A. Shakal has reported these accomplishments to the Advisory Committee, with C. Stevens from the USGS reporting on the international data. Distance to fault as well as

epicentral distance are now included. N. Abrahamson had asked about fault distance versus rupture distance, and rupture distance will be used in the future. The Committee recommended not waiting to get the table up until the model exists, with a reference to what model was used. Reference spectrum from USGS lookup website. It was suggested including more spectral periods for NGA, but the committee believes that ~100 periods in the calculation, not 1000's, was sufficient.

Small magnitude data is now available via a ftp site but is not processed, as well as long distance from large events where motions are small. The VDC integration is progressing, with H. Haddadi managing the project. A contract is about to be put in place that automates the import process for new and older data. CGS has handled much of the MAC to PC conversion of the VDC code. The NGA project suggested that horizontal mean should be computed, but committee did not agree. Three components will be shown with PGA and PGV values from each component.

R. Bachman commented that it was envisioned that the COSMOS Working Group tie-in with the CESMD Advisory Committee. C. B. Crouse is the Chair of the Working Group as well as a member of the Advisory Committee. C. B. Crouse noted that the VDC integration must be completed before the COSMOS Working Group is viable. A. Shakal and J. Parrish said that the integration should be completed by summer 2011.

14. Report of International Committee —J. Steidl

J. Parrish suggested setting up a COSMOS-based international organization that establishes an international agreement signed by multiple countries that would abide by the general participation rules. It could called "COSMOS International" and might be used to organize international workshops.

Action Item: J. Steidl to develop a plan and MOU before next board meeting between international partners with COSMOS to host the COSMOS International Forum in Santa Barbara in August 2011 in conjunction with ESG4 meeting.

15. Report of the VDC Tool Committee —C. B. Crouse

C. B. Crouse had nothing to report, citing that the committee work is dependent on the completed integration of the VDC into the CESMD. J. Steidl commented on a web-based DGML tool beta version developed by PEER. Discussions with Y. Bozorgnia should be opened about integration of this tool into the CESMD and VDC datasets. J. Steidl to send a link to the Board of Directors for the web-based tool.

16. Report of the Strong-Motion Standards Committee—A. Shakal

Metadata requirements for strong-motion records were distributed for review, with a minimum set of requirements to make the record "usable". This should become a COSMOS standard. R. Nigbor suggested "version" control if COSMOS is going to call these standards. They should be posted on the COSMOS website for review by the greater community. C. B. Crouse noted that even this minimum set is more than most engineers would care about.

Action Item: Board to study metadata requirements and then this will be vote on at the next Board of Director's meeting.

Default accelerograph parameter settings were distributed for review. A. Shakal suggested that COSMOS should solicit input from manufacturers and get their buy in. W. Iwan suggested that the Board study this document and provide comments to A. Shakal.

Action Item: Board to study accelerograph parameter settings and then this will be voted on at the next Board of Director's meeting.

Site characterization standards were distributed for review. Including Level 1 through 4 and nearby environment (close to tall buildings or tall trees). Standard Geologic classification description is included. There is a USGS pilot project to conduct non-invasive site characterization at 189 strong-motion sites (185 in CA), which raises the question: Can level 2 (non-invasive) compare with level 1 (drilled sites). A. Shakal suggested COSMOS establish a WebEx account for the committees to use.

Action Item: C. Johnson to investigate costs associated with WebEx.

17. New Business

R. Nigbor suggested that COSMOS establish guidelines for instrumentation of new nuclear power plants. Currently, there are ~1000 channels of SGM channels at NPP around the U.S. Power plants have 4 hours to tell the NRC what the ground motions were after an earthquake. The NRC is paying for the cost of the installation of ANSS/EarthScope stations, with ANSS maintaining and operating the stations. He's not sure how many stations or which ones. Many NPP have SMA-1's (Film) and SMA-3's (tape). IRIS is hosting an instrumentation workshop June 16th-17th in Albuquerque, focusing on operations and maintenance, and instrumentation needs. Can COSMOS be a sponsor of this workshop? IRIS standards for new borehole and surface seismometers to be used for procurement.

ACTION ITEM: Send minutes to R. Nigbor to expand on his comments.

17. Adjourn

J. Parrish moved to adjourn the meeting. The meeting was adjourned at 7:45 PM.