CALIFORNIA INSTITUTE OF TECHNOLOGY

SEISMOLOGICAL LABORATORY 252-21 Division of Geological and Planetary Sciences

Professor Norio Okada Disaster Prevention Research Institute Kyoto University Uji, Japan

1/14/2004

Dear Professor Okada:

As I have indicated earlier, I am sorry that I am not able to participate in the External Examination Committee meeting.

I have read the materials sent to me, but without the benefit of being at the meeting and of asking questions directly, it is a little hard to assess the situation intelligently. The following is just a very brief impression, and I would appreciate receiving the result of all the deliberations at the meeting which would help me form a more informed opinion.

First, I am very impressed with the broad research areas covered by DPRI, and believe that the Institute is fulfilling the original objectives successfully.

I am not sure whether I received the report of the previous External Examination Committee (there is no document marked as such), and I could only guess the recommendations from the responses (Document I).

After having read the responses, I have comments on two points:

1. Faculty Recruitment

The most important of all in building an active research institution is to recruit the best possible people in the field. Although all the positions are publicly advertised, I do not believe that this mechanism alone will bring in the best candidates. It is important to take a more proactive approach in identifying good candidates and encouraging them to apply for the advertised positions. Judging from the response, this practice does not seem to be exercised widely. It is also very important to diversify the staff by adding more foreign scholars and qualified woman faculty members. In view of the very broad interdisciplinary nature of the programs at DPRI, an

intensified effort to diversify the faculty would be particularly important for maintaining and strengthening active and vibrant research programs. The Institute needs to work hard to create infrastructure (e.g., International office etc) to promote this.

2. Interdisciplinary Research between Engineering and Science

I believe that DPRI is one of a few, if any, institutions in the world where a large number of engineers and scientists reside together in the same lot. This is very desirable in disaster prevention programs, because I believe that it is essential for engineers and scientists to work together for the most effective implementation of new ideas for practical purposes. This has been emphasized by many, but as far as I can see, it is easy to say, but is extremely difficult to accomplish mainly because of the very different approach and culture in the two disciplines. At DPRI, the collaborative efforts seem to be made far more successfully than at many other places, but I believe that the structure like DPRI may be able to develop a novel system which promotes even more active interactions between engineers and scientists. An internal committee may be created to look into this. One method which I have found very successful is to have graduate students working under joint supervision of professors of both engineering and science. Of course, this would impose more work and responsibility on both students and professors, but I would think that this kind of system is easy to implement in the structure like DPRI, and would be extremely effective in producing the next generation of engineers and scientists who can think broadly beyond the boundary of science and engineering, and can further the mission of DPRI in the most effective way. My impression is that collaborations by people who have been trained in each one of the disciplines are useful, but limited. It is important to produce people who are trained in both disciplines, and I believe that DPRI can play an important role in this endeavor.

As I mentioned earlier, the information I have at hand is limited, and I am writing this just by my impression after reading the documents; whatever I have suggested may have been already implemented in the DPRI program.

Sincerely,

Hiroo Kanamori John E. and Hazel S. Smits Professor of Geophysics