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Dr. Milton Glick Dr. Marc Johnson President's Office University of Nevada, Reno Reno, NV 89557-001

Dear President Glick and Provost Johnson,

I write to strongly recommend against the proposed budget cut and reduction of activities in the Nevada Bureau of Mines and Geology (NBMG). Given the economic importance of Nevada's natural resource industries and the state's significant geological hazards, the proposed cuts would harm the state's economy and people.

Having visited UNR and worked with NBMG scientists, I am familiar with NBMG. It plays a crucial role in conducting research directly related to the state's people and economy, and then working with the private sector and public to apply the results. As a result, this research is an investment in the state's future that will pay for itself many times over.

NBMG is regarded as one of the nation's finest such such organizations. It is a well-run and led organization with world-class researchers. It is generally regarded as an ideal example of what such an agency can do. To cite three major examples:

1) NBMG has a world-class program in mineral resource science, which plays a crucial role supporting Nevada's multibillion dollar minerals industry. Finding and developing mineral resources is a sophisticated high-technology enterprise, in which new knowledge allows new resources to be developed as older ones are extracted. As a result, the mining industry can grow and prosper so long as new approaches are discovered and developed. Thus studies of the challenging questions of how and where mineral resources form are essential to the industry, which uses the results to locate and develop production. NBMG's work lays the foundation to ensure that this industry will continue to thrive and grow.

- 2) NBMG is conducting important research required to develop Nevada's geothermal energy resources, which make Nevada the second largest geothermal energy producer in the nation. As for minerals, developing new knowledge to resolve challenging problems is crucial for this energy source to reach its full potential. Investing in this resource will be incredibly valuable to the state, given the rising cost of fossil fuels. In years to come, the cost of energy will become an increasing factor in where businesses and industries chose to locate.
- 3) NBMG is a national leader is studying geological hazards and helping the state address them in sensible and economic ways. The "price" of Nevada's mineral and geothermal resources is living in a sustainable way in a geologically active area with major hazards. In particular, the state has one of the nation's largest earthquake hazards. NBMG researchers have been leaders in studying these hazards, including developing one of the finest programs in the world using ultra-high-precision Global Positioning System data to assess how and where future earthquakes are likely. NBMG has also produced the best educational material I know of to explain earthquake hazards and preparedness to the public. I have used some of this material in my new book about earthquakes.

In summary, despite the state's serious financial difficulties, the proposed cuts would be a major mistake. The loss of talented researchers and important programs would cause damage for many years. It is crucial to think of NBMG's activities as investments in the state's future economic growth.

Seth Stein William Deering Professor

James Macelwane Medalist, American Geophysical Union George Woollard Awardee, Geological Society of America Stephan Mueller Medalist, European Geosciences Union Foreign member, Academy of Europe Fellow, American Geophysical Union Fellow, Geological Society of America