



## United States Senate

WASHINGTON, DC 20510-0504

<http://feinstein.senate.gov>

December 13, 2011

The Honorable Steven Chu  
Secretary of Energy  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585-1000

Dear Secretary Chu,

Several recent accidents, including a deadly disaster in San Bruno, California, have demonstrated that the deterioration of the natural gas pipeline infrastructure puts life and property at risk. I am writing to urge you to review whether your Department could deploy its extraordinary expertise to develop methods to prevent such devastation from taking place in the future.

Thousands of miles of pipeline – especially older pipelines – cannot be inspected by modern robotic in-line devices, known as “smart pigs,” because the inspectors cannot get by twists, turns, or changes in pipe diameter common in older pipelines.

The oil and gas industry and the U.S. Department of Transportation (USDOT) fund some research in this area. Industry contributed \$39 million to pipeline research and development consortia in the last five years, and USDOT has spent \$8.5 million on 19 smart pig research and development projects since 2002.

I believe that this effort could be considerably enhanced by deploying the expertise of California’s National Laboratories to improve pipeline safety technology. For instance, Lawrence Berkeley National Laboratory has relevant expertise in instrumentation and robotics engineering, as demonstrated by the development of unexploded ordinance detection robots that won the Lab a prestigious R&D 100 award. Similarly, Lawrence

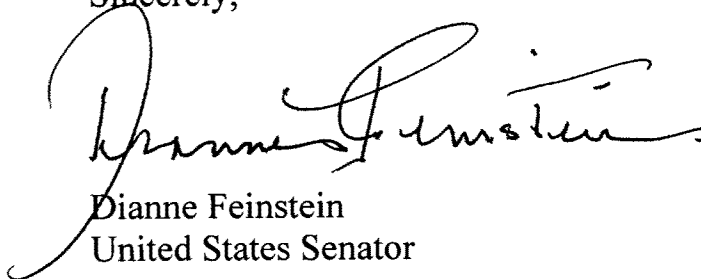
Livermore National Laboratory has technological capabilities that could be highly useful in leak detection and pipeline integrity assessment.

I would greatly appreciate it if you would conduct a review of pipeline safety technology and the capacity of your department to improve safety. Specifically, it would be very helpful to see a report that:

- Examines pipeline safety and inspection methods and instrumentation in order to identify technologies that could be improved or applied more effectively;
- Identifies technical challenges that limit the development of in-line inspection tools capable of inspecting a higher percentage of current pipelines;
- Proposes a strategy to use the unique capabilities of the National Laboratories to expedite the development of new, more effective pipeline safety and inspection technologies.

I look forward to working with you on ensuring that our natural gas pipelines are as safe as possible. Please do not hesitate to call me should you have any questions.

Sincerely,



Dianne Feinstein  
United States Senator

DF/mbn