and enrich their CEOs, as I have explained earlier.

Not only do we need to impose a windfall profits tax on these extremely powerful oil corporations, but we also have to address what I perceive is a growing understanding that Wall Street investment banks, such as Goldman Sachs, Morgan Stanley, JPMorgan Chase, and hedge fund managers are driving up the price of oil in the unregulated energy futures market. In other words, they are speculating on energy futures and driving up prices.

There are estimates that 25 to 50 percent of the cost of a barrel of oil is attributable to unregulated speculation on oil futures. We have heard from some leading energy economists, and we have heard from people in the oil industry themselves who tell us that 25 to 50 percent of the cost of a barrel of oil today is not due to supply and demand or the cost of production but is due to manipulation of markets and excessive speculation. In essence, Wall Street firms are making billions as they artificially drive up oil prices by buying, holding, and selling huge amounts of oil on dark unregulated markets.

Some of my Republican friends claim that the increase in the price of oil has nothing to do with speculation, but it is interesting to me that we have had executives of major oil companies—major oil companies—who have come before Congress and who are saying, "Why is oil \$125, \$130, and \$140 a barrel?" Do you know what they say? The CEO of Royal Dutch Shell testified before Congress and said: "The oil fundamentals are no problem. They are the same as they were when oil was selling for \$60 a barrel."

This is not some radical economist. It is not some left-winger. This is a guy who is the head of Royal Dutch Shell.

The CEO of Marathon Oil recently said: "\$100 oil isn't justified by the physical demand in the market."

I know my Republican friends have a lot of respect for the oil industry, a great competence in them. They love them and give them huge tax breaks. So maybe they should listen to what some of these guys are saying in terms of oil speculation.

For those who believe that excessive speculation is not causing oil prices to climb higher, let me just say this. Over the past 7 years, Enron; BP; and Amaranth were caught redhanded manipulating the price of electricity; propane; and natural gas. Each time, supply and demand was to blame and each time the pundits were proven wrong. Excessive speculation; manipulation and greed were the cause. Enron employees are in jail for manipulating the electricity market in 2001; BP was forced to pay a \$300 million fine for manipulating propane prices in 2004; and the Amaranth hedge fund collapsed after manipulating natural gas prices in

The Stop Excessive Speculation Act introduced by Majority Leader REID

begins to seriously address this problem. We need to pass this bill as soon as possible.

The bottom line is that it is time for the United States Senate to say no to big oil companies and greedy hedge fund managers and yes to the American people.

SUBMITTED RESOLUTIONS

SENATE RESOLUTION 636—RECOGNIZING THE STRATEGIC SUCCESS OF THE TROOP SURGE IN IRAQ AND EXPRESSING GRATITUDE TO THE MEMBERS OF THE UNITED STATES ARMED FORCES WHO MADE THAT SUCCESS POSSIBLE

Mr. LIEBERMAN (for himself, Mr. Graham, Mr. McCain, Mr. Enzi, Mr. Martinez, Mr. Bond, Mr. Wicker, Mr. Cornyn, Mr. Crapo, Mr. Allard, Mr. Thune, Mr. Barrasso, and Mr. Inhofe) submitted the following resolution; which was referred to the Committee on Armed Services:

S. RES. 636

Whereas, by the end of 2006, it had become clear that, despite exceptional efforts and sacrifices on the part of the United States Armed Forces in Iraq, the United States was pursuing a failed strategy in Iraq;

Whereas, by the end of 2006, large-scale sectarian violence was accelerating throughout Iraq, al Qaeda had established significant safe havens there, militias sponsored by the Government of Iran had seized effective control of large swaths of Iraq, and the Government of Iraq was suffering from political paralysis:

Whereas, by the end of 2006, insurgents and death squads were killing more than 3,000 civilians in Iraq each month and coalition forces were sustaining more than 1,200 attacks each week:

Whereas, in December 2006, the Iraq Study Group warned that "the United States is facing one of its most difficult and significant international challenges in decades" in Iraq and that "Iraq is vital to regional and even global stability, and is critical to U.S. interests";

Whereas, in December 2004, Osama bin Laden said the following of the war in Iraq: "The most important and serious issue today for the whole world is this Third World War. . . The world's millstone and pillar is Baghdad, the capital of the caliphate.";

Whereas, on January 10, 2007, in an address to the Nation, President George W. Bush acknowledged that the situation in Iraq was "unacceptable" and announced his intention to put in place a new strategy, subsequently known as "the surge":

Whereas President Bush nominated and the Senate confirmed General David H. Petraeus as the Commander of Multi-National Forces-Iraq, a position he assumed on February 10, 2007;

Whereas General Petraeus, upon assuming command, and in partnership with Lieutenant General Raymond Odierno, the Commander of Multi-National Corps-Iraq, and United States Ambassador to Iraq Ryan Crocker, developed a comprehensive civilmilitary counterinsurgency campaign plan to reverse Iraq's slide into chaos, defeat the enemies of the United States in Iraq, and, in partnership with the Iraqi Security Forces and the Government of Iraq, reestablish security across the country;

Whereas, under the previous strategy, the overwhelming majority of United States combat forces were concentrated on a small number of large forward operating bases and were not assigned the mission of providing security for the people of Iraq against insurgents, terrorists, and militia fighters, in part because there were insufficient members of the United States Armed Forces in Iraq to do

Whereas, as an integral component of the surge, approximately 5 additional United States Army brigades and 2 United States Marine Corps battalions were deployed to Iraq;

Whereas, as an integral component of the surge, members of the United States Armed Forces were deployed out of large forward operating bases onto small bases throughout Baghdad and other key population centers, partnering with the Iraqi Security Forces to provide security for the local population against insurgents, terrorists, and militia fighters;

Whereas additional members of the United States Armed Forces began moving into Iraq in January 2007 and reached full strength in June 2007.

Whereas, as a consequence of the additional forces needed in Iraq, in April 2007 the United States Army added 3 months to the standard year-long tour for all active duty soldiers in Iraq and Afghanistan, and the United States Marine Corps added 3 months to the standard 6-month tour for all active duty Marines in Iraq and Afghanistan;

Whereas, as an integral component of the surge, members of the United States Armed Forces began simultaneous and successive offensive operations, in partnership with the Iraqi Security Forces, of unprecedented breadth, continuity, and sophistication, striking multiple enemy safe havens and lines of communication at the same time:

Whereas, as an integral component of the surge, additional members of the United States Armed Forces were deployed to Anbar province to provide essential support to the nascent tribal revolt against al Qaeda in that province:

Whereas those additional members of the United States Armed Forces played a critical role in the success and spread of anti-Qaeda Sunni tribal groups in Anbar province and subsequently in other regions of Iraq:

Whereas, since the start of the surge in January 2007, there have been marked and hopeful improvements in almost every political, security, and economic indicator in Iraq;

Whereas, in 2007, General Petraeus described Iraq as "the central front of al Qaeda's global campaign":

Whereas, in 2008, as a consequence of the success of the surge, al Qaeda has been dealt what Director of Central Intelligence Michael Hayden assesses as a "near strategic defeat" in Iraq;

Whereas, as a consequence of the success of the surge, militias backed by the Government of Iran have been routed from major population centers in Iraq and no longer control significant swaths of territory;

Whereas, as a consequence of the success of the surge, sectarian violence in Iraq has fallen dramatically and has been almost entirely eliminated;

Whereas, as a consequence of the success of the surge, overall insurgent attacks have fallen by approximately 80 percent since June 2007 and are at their lowest level since March 2004;

Whereas, as a consequence of the success of the surge, United States casualties in Iraq have dropped dramatically and United States combat deaths in Iraq in July 2008 were lower than in any other month since the beginning of the war; Whereas, as a consequence of the success of the surge, the Government of Iraq has made significant strides in advancing sectarian reconciliation and achieving political progress, including the passage of key benchmark legislation:

Whereas, as a consequence of the success of the surge, the Iraqi Security Forces have improved markedly and approximately 70 percent of Iraqi combat battalions are now leading operations in their areas; and

Whereas, as a consequence of the success of the surge, General Petraeus concluded in 2008 that conditions on the ground in Iraq could permit the additional brigades and battalions dispatched to Iraq in 2007 as part of the surge to be safely redeployed without replacement, and all such brigades and battalions have been successfully withdrawn without replacement: Now, therefore, be it

Resolved, That the Senate-

(1) commends and expresses its gratitude to the men and women of the United States Armed Forces for the service, sacrifices, and heroism that made the success of the troop surge in Iraq possible;

(2) commends and expresses its gratitude to General David H. Petraeus, General Raymond Odierno, and Ambassador Ryan Crocker for the distinguished wartime leadership that made the success of the troop surge in Iraq possible;

(3) recognizes the success of the troop surge in Iraq and its strategic significance in advancing the vital national interests of the United States in Iraq, the Middle East, and the world, in particular as a strategic victory in a central front of the war on terrorism: and

(4) recognizes that the hard-won gains achieved as a result of the troop surge in Iraq are significant but not yet permanent and that it is imperative that no action be taken that jeopardizes those gains or dishonors the service and sacrifice of the men and women of the United States Armed Forces who made those gains possible.

SENATE RESOLUTION 637—TO HONOR THE VISIONARY AND EX-TRAORDINARY WORK OF LOS AL-AMOS NATIONAL LABORATORY AND IBM ON THE ROADRUNNER SUPERCOMPUTER

Mr. DOMENICI (for himself and Mr. BINGAMAN) submitted the following resolution; which was referred to the Committee on Energy and Natural Resources:

S. RES. 637

Whereas on May 26, 2008, the Roadrunner supercomputer of the Los Alamos National Laboratory broke a historic barrier by being powerful enough to run at a petaflop, 1,000,000,000,000,000 calculations per second, making the Roadrunner supercomputer the fastest computer in the world;

Whereas International Business Machines Corporation (referred to in this resolution as "IBM") and Los Alamos National Laboratory overcame the challenges of technological innovation to achieve a petaflop ahead of schedule;

Whereas the Roadrunner supercomputer will enable the United States to tackle new and more challenging problems;

Whereas the Roadrunner supercomputer will be primarily devoted to national security in the United States and will be used for ensuring the safety and reliability of the weapons stockpile of the United States and for research in astrophysics, materials science, energy research, medicine, and biotechnology;

Whereas Cell-based supercomputer technology of IBM is the most energy efficient in the world:

Whereas the new high-performance computing capabilities enabled by hybrid Opteron-Cell machines of IBM in the Roadrunner supercomputer of Los Alamos National Laboratory enhance and improve United States competitiveness;

Whereas from maintaining employment records for millions of people of the United States, to providing technology to help the United States run the Ballistic Missile Early Warning System, land on Mars, end the physical testing of atomic weapons, and now help national security by ensuring the safety of the nuclear weapons stockpile of the United States and researching issues of critical importance such as human genome science and climate change, the partnership of IBM with the Federal Government and the dedication of that partnership to solving critical problems that are seemingly impossible have remained unrivaled and relentless for more than 80 years;

Whereas the Roadrunner supercomputer is the most recent achievement of long-standing science and technology leadership of Los Alamos National Laboratory, from the Manhattan Project to the role of the Laboratory today as a premier national security science laboratory; and

Whereas, the Roadrunner supercomputer funding was initiated with \$35,000,000 in the Energy and Water Development Appropriations Act, 2006 (Public Law 109–103): Now, therefore, be it

Resolved, That the Senate honors the visionary and extraordinary work of Los Alamos National Laboratory and IBM for—

- (1) pushing the barriers of science and providing the United States with historical high-performance computing capabilities that will allow some of the most challenging problems in science and engineering to be solved; and
- (2) achieving the capability to make petaflop calculations, which—
- (A) is considered a crucial milestone internationally;
- (B) is considered a sign of the competitiveness of the United States in the critical new area of high-performance computing capability; and
- (C) will allow the United States to solve even bigger and more complex problems from the safety of the nuclear deterrent of the United States to human genome science and climate change.

Mr. DOMENICI. Mr. President, I come to the floor today to introduce a resolution to recognize the achievement of a major scientific milestone by two great American institutions—Los Alamos National Laboratory and IBM—to build the first supercomputer to break the "petaflop" barrier in supercomputing. A petaflop is a million, billion calculations per second. Think of that—a million, billion calculations in a second. If every human being on the planet were given a calculator it would take 50 years to do what this supercomputer can do in a single day.

This supercomputer is called the "Roadrunner" and was developed cooperatively by the Los Alamos National Laboratory and IBM—two American institutions which have a long and prestigious history in delivering major technological breakthroughs for the Nation.

The Roadrunner is the fastest computer in the world. It more than dou-

bles the previous record. We can be very proud this achievement for American science and technology. It highlights the essential role our national laboratories play in advancing the state of the art for high performance computing—a vital component of our national security and scientific leadership.

Every year, computing power increases at a pace set by America's national laboratories. From developing advanced computing architectures and algorithms, to creating effective means for storing and viewing the enormous amounts of data generated by these machines, the laboratories have made high performance computing a reality.

These applications go well beyond security and basic science. The laboratories have worked hard to transition these capabilities to academia and industry, simulating complex industrial processes and their environmental impact, including global climate change.

Collaborations with the private sector have also driven down the cost, so that now high performance does not mean high expense. This has had an enormous impact, placing advanced computing within reach of an ever wider circle of users.

These achievements did not happen by accident. They required planning, commitment and follow through. Indeed, the Roadrunner began as an earmark in the fiscal year 2006 appropriations bill. Congress must ensure that the world class simulation capabilities within the complex are maintained and investments are made to drive future innovation.

We must continue to raise the bar, giving our best and brightest new goals to work toward, ensuring that America will retain its technical leadership in advanced computing.

I hope my colleagues will join me in recognizing Los Alamos National Laboratory and IBM for reaching yet another milestone in supercomputing.

In particular, I want to commend the members of the Roadrunner team.

From Los Alamos: Sriram Swaninarayan, Paul Henning, Adolfy Hoisie, Guy Dimonte, Darren Kerbyson, Brian Albright, Tim Germann, Ben Bergen, Ken Koch, Manuel Vigil, Randal Rheinheimer, Parks Fields, John Cerutti.

From IBM: Nicholas Donofrio, Cornell Wright, William Zeitler, David Turek, Don Grice, and Catherine Crawford.

Participants from academia included Steven Zuker of Yale University and James DiCarlo from the Massachusetts Institute of Technology.

Congratulations on a job well done.

Top 10 Fastest Supercomputers in the World (June 2008).

Name, Location, Speed (TFlop/s).

- 1. Roadrunner (IBM), Los Alamos, NM (NNSA), 1026.0.
- 2. Blue Gene/L (IBM), Livermore, CA (NNSA), 478.2.
- 3. Blue Gene/P (IBM), Argonne, IL (DOE), 450.3.