The reason is quite clear: Because the Federal Government has demanded from day one that those shipments be done in extraordinary ways, extraordinary super-built containers, much of it traveling by rail. The high-level waste that comes to Idaho is naval waste. It comes by rail. But the low-level waste that leaves Idaho leaves by highways in very well designed, tremendously strong containers, and well-managed, selected routes, all of it guided and monitored by GPS. It is tremendously safe today as that waste goes from Idaho to the Waste Isolation Pilot Plant in Carlsbad, NM.

Yes, we have a right to be concerned, but we do not have a right to use alarm and fear where they should not exist. But we have a right to do what is responsible to keep it out of our populated areas, to move it in appropriate fashions in less populated ways.

The Senator from Nevada speaks about rail and an appropriate and safe way to handle it, well demonstrated, well proved. And the Nuclear Regulatory Commission may well want even enhanced containers. But what I would suggest is that if we fail to act today to determine the next step, and many of these utilities go to a private location and establish a private repository—as some are now contemplating—then there is a strong possibility that, in a much less regulated way, in a much less orchestrated and monitored way, we will see nuclear waste moving across this country simply because we failed to act and failed to organize and failed to respond to a highly regulated, highly controlled, and highly monitored transportation system.

Those are the realities of where we are today with this industry and where we are today with the volume of nuclear waste, high-level spent fuel nuclear waste that is building up in repositories across the country. It isn't damned if you do and damned if you don't. It is a responsible and important step to take to move this resolution through to a licensing procedure which will then have full transparency, which will then have the ability of the Senate of the United States and the House to do the kind of oversight necessary to make sure that we can recognize what both Senators from Nevada, who are in the Chamber, need: The best assurance possible, in a zero sum game, if you can get there, that this has been done to the maximum capability of the engineering talent of the best we have to offer.

The 10,000-year protocol established all of those kinds of things that meet the standards that are so critically necessary to do what is right and responsible for this country: store our high-level waste in a deep geologic repository; cause the next step to happen; advance the future of the nuclear industry; advance clean electrical energy for our country well into the future.

It is a responsible act that the Senate undertakes today to allow that very kind of thing to happen. I hope this afternoon, when we have an opportunity to vote on the motion to proceed, which, in fact, is a vote on whether we will allow the process to go forward, a majority of the Senate will vote in favor of that motion to proceed.

I yield the floor.

RECESS

The PRESIDING OFFICER. Under the previous order, the Senate stands in recess until 2:15 p.m.

Thereupon, at 12:30 p.m., the Senate recessed until 2:15 p.m. and reassembled when called to order by the Presiding Officer (Ms. STABENOW).

APPROVAL OF YUCCA MOUNTAIN REPOSITORY—MOTION TO PROCEED—Continued

The PRESIDING OFFICER. The Senator from Minnesota.

Mr. WELLSTONE. Madam President, I yield myself 15 minutes.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. WELLSTONE. Madam President, the Senate today is faced with an important decision about whether to ship extremely hazardous, high-level nuclear waste to a permanent repository in Yucca Mountain. Let there be no doubt in anyone's mind, I would like to see this nuclear waste shipped safely out of Minnesota. I wish I could responsibly vote to support this resolution. I regret that I cannot today vote in favor.

I have consistently said that before the Department of Energy and the Congress make a final judgment that we are ready to begin shipping high-level nuclear waste to a repository, there should be a carefully thought out, detailed plan in place, approved by the NRC and the DOE, to transport this radioactive waste and to manage all of the risks associated with that transportation.

Although it has had over 30 years to do so, the Department of Energy has failed to develop such a safe—I emphasize ''safe''—waste transportation plan.

While I want this high-level nuclear waste out of our State and think Yucca Mountain may very well be the most sensible location, I don't think we should move forward and commit ourselves irrevocably until we have all of the transportation and security issues addressed.

Therefore, I have come to the conclusion, through a careful examination of congressional testimony, meetings with DOE officials, including the Secretary of Energy, State energy officials and local leaders, that there are too many uncertainties, too many unresolved issues, and the risks are simply too high for the citizens of Minnesota.

I cannot now support this resolution. We urgently need to develop a comprehensive waste transportation plan and policy that protects the health and safety of local communities and all Americans. We should have such a plan in place before moving forward on a permanent repository plan.

It is unacceptable to me as a Senator that the Department of Energy has ignored the very real and daunting task of developing a secure, comprehensive transportation plan before seeking to authorize the Yucca Mountain site.

The simple fact is, the Congress should not be considering nor should the DOE have recommended authorization of the Yucca Mountain site before State and local officials were consulted and a comprehensive transportation plan has been finalized which takes into account their concerns and the people they represent.

Madam President, even though the Department of Energy has had years to develop such a plan, they don't have one. By the way, I thank Secretary Abraham. I have talked with him over the phone. He has been very gracious, and I appreciate that. But when he testified May 16, 2002, that the ''Department is just beginning to formulate its preliminary thoughts about a transportation plan,'' to me, that is not enough for my State or the country.

The Department spent $7 billion looking into Yucca Mountain geology but less than $2 million on the transportation of the nuclear waste. That works out at less than $10 million a year for the last 20 years. This is a fundamental flaw in the Department's approach. So, to me, failing to plan for the safe and secure transport of nuclear waste before approving the repository site would be irresponsible.

I recognize the industry has had a generally safe record of transporting small amounts of nuclear waste over the last 35 years. But shipments to Yucca Mountain would be at an unprecedented level. The Department of Energy estimates that transportation to a central repository could involve the shipment of more than 46,000 tons of high-level radioactive nuclear waste across 40 States in 53,000 trucks or 20,000 railcars. It is worth noting that even if the shipments were to begin today, there are more than 200 million Americans living in the 700-plus counties that are traversed by DOE's potential roads and rail lines. The population is only going to grow, and grow more quickly, during the time DOE needs to move nuclear waste across the country.

Beginning in 2010, the DOE estimates that over 1,000 truck and rail shipments of nuclear waste could well travel through Minnesota, through our most populated cities and towns such as Minneapolis-St. Paul, Mankato, Rochester, and the Twin City suburbs. So 683,000—looking at the proposed route—Minnesotans would live within 1 mile; 2,213,612 Minnesotans would live within 5 miles; 3,121,718 Minnesotans would live within 20 miles. That is about half of the State's population.

This raises a very important and yet unanswered set of questions about the risks of possible accidents or terrorist

attacks, and how local communities through which the waste would travel would manage the risk. That is why the Conference of Mayors passed a resolution just this past June expressing serious concerns about the issue and urging the Congress to prohibit the transport of waste until all cities—I include Minnesota cities and towns—along the proposed transportation route have been consulted and have received adequate training and equipment to protect the public health and safety of the citizens in the event of an accident.

Again, I thank the Department of Energy and I thank the Secretary for his graciousness. Unfortunately, DOE has yet to hold any public meetings in recent years in Minnesota on the topic of, again, where is this going to go, what kind of training is there going to be, and how are we going to prevent an accident? To me, this is a key issue.

Example: The DOE environmental impact statement maintains that shipping high-level spent fuel casks on mixed general freight trains is acceptable. This would permit casks of high-level nuclear waste to be mixed among cars of corn, soybeans, autoparts, and other goods. I am concerned that the DOE's regulations appear to be market driven; mixed freight trains are cheaper than dedicated trains.

As the American Association of Railroads testified, DOE's position is ''driven, no doubt, by economic consideration.'' But the safe transportation of these highly toxic materials must take precedence over any cost considerations. I agree with the American Association of Railroads that dedicated trains would be a safer and more prudent alternative. I would like to have that laid out for me before we have a final vote on the repository.

Madam President, I believe a transportation plan for nuclear waste shipments should have a ''zero accident'' goal, but as yet the DOE doesn't even have a plan. A zero accident goal would reflect a culture in which safety is paramount and drives all aspects of the transportation system. That goal encourages a culture of safety.

I know there are safety concerns about these materials being stored where they are. The Department of Energy has argued that we need to consolidate this waste in one location. But that argument overlooks the fact that authorization of Yucca Mountain as a permanent repository doesn't solve these concerns. The only reactors that will get rid of their waste completely, according to the DOE, are those that are closed today—and those are not in Minnesota.

According to the draft environmental impact statement prepared by DOE, the Monticello and Prairie Island reactors will still have 111 and 344 metric tons of high-level nuclear waste, respectively, onsite when Yucca Mountain is full.

Despite what the proponents would have us believe, the DOE's proposal fails to eliminate Minnesota's nuclear waste. Nationwide, when the Yucca Mountain project is completed, there will roughly be the same amount of high-level nuclear waste at powerplants across the country as there is today. We simply cannot afford to overlook the real and pressing security concerns inherent with the transportation of this fuel, nor can we ignore the fact that the next generation will still be left with similar problems of what to do with the waste.

I will conclude this way. We urgently need to achieve a real solution to our storage problem with high-level nuclear waste, as opposed to forcing authorization of Yucca Mountain before there is a comprehensive plan for transporting the waste safely and securely before it is in place.

I believe the Department of Energy needs to immediately begin a true collaborative process, seeking broad-based stakeholder input on the real challenges of transportation safety and emergency preparedness. While the Department of Energy has elected to proceed with significant questions remaining unresolved, a comprehensive transportation plan developed through a consultative process would give DOE's proposal for Yucca Mountain the credibility it now lacks. The DOE should immediately organize a stakeholder task force to develop transportation recommendations that include the experts on the ground, such as Governors and their safety agencies, local elected officials of the large and small towns where the waste will travel, emergency preparedness experts, and public health and safety officials, and develop a responsible plan that would transport this waste safely before a final decision is made.

I believe there are a whole host of issues surrounding the transportation of nuclear waste material that must be addressed before final decisions are made on Yucca Mountain. We can make the decision next year or the year after. That would be fine with me—if these concerns can be met first.

Unfortunately, the administration has elected to force the issue before all these concerns can be sufficiently addressed. I want to be able to support this resolution. I would like to be able to vote to move the high-level nuclear waste out of Minnesota. But I cannot, in good conscience, do this before there is a comprehensive plan in place to protect Minnesotans as this radioactive waste is moved through our State to Yucca Mountain, and from our State to Yucca Mountain.

I think forcing the issue before such a comprehensive plan is in place would be a serious mistake, and that is why I intend to vote no on this resolution.

The PRESIDING OFFICER. The Senator from Alaska is recognized.

Mr. MURKOWSKI. Madam President, while I have the attention of the Senator from Minnesota, the Department of Energy did a comprehensive analysis called ''The Spent Nuclear Fuel Transportation System,'' which I think encompasses a good deal of the concerns of the Senator from Minnesota. I encourage that he review it at his leisure.

I also remind my colleagues that the issue before us is simply licensing and the authority that this body gives the Department of Energy to proceed with the license. That licensing process will legitimately conclude in an evaluation of the adequacy of the transportation proposals either by rail, road, or a combination of both involving the Nuclear Regulatory Commission, the Department of Transportation, the Department of Energy, and the National Academy of Sciences. They are judged to be the best experts as opposed to those of us who obviously are not necessarily specialists but generalists in this area, although we have some expertise in legislation.

I also remind my colleagues that this is the formal process of some 20 years in evolution of addressing the procedure to address the waste.

I am sensitive to the needs of my colleagues from Nevada who obviously do not want the waste in their State, but I remind my friend from Minnesota that there are 835 metric tons of nuclear fuel stored in Minnesota in two locations, and that Minnesota has three nuclear units—Prairie Island 1 and 2 and Monticello.

As a consequence of the procedures we have initiated, there appears to be one of two solutions: We either proceed and let the experts in the agencies address a transportation plan in the sequence that has been laid out that follows after the licensing, or we are going to be right back where we were 20 years ago on what to do with the waste. I can assure my colleagues, nobody wants it, but we have created it, and we have an obligation to take care of it.

I would like to identify, so we can move along in sequence, those speakers who have requested time on our side. We have Senator BINGAMAN, who has asked for 10 minutes; Senator THOMAS, some 8 to 10 minutes; Senator CRAPO, 5 minutes; Senator KYL, 10 minutes. I would like to reserve some time for myself, about 20 minutes.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Madam President, I will say quickly that this document about which my friend from Alaska refers is not worth the paper on which it is written. It talks about 4,300 shipments on trains—they have no trains at Yucca Mountain, 100 miles from any train. This piece of trash—and that is what it is—is typical of what the Department of Energy has done. It is one big lie after one big lie.

As indicated by anyone who looks at it, there are 292 reports that they did not even wait to see what the answers would be. The General Accounting Office said that, not some radical environmental group—the General Accounting Office. So the statements of my friend from Minnesota are directly on point. This means nothing.

Madam President, in keeping with having some degree of preciseness on the floor—I will be happy to yield some time to my friend—I am going to yield 10 minutes in a minute to the Senator from Minnesota and then it is my understanding the Senator from Alaska will yield 10 minutes to the Senator from New Mexico, and following that, I will yield 10 minutes to the Senator from California, Mrs. BOXER, who almost made it here this morning. Then if the Senator from Alaska has somebody who wishes to speak, that is fine; otherwise, I will yield time to the Presiding Officer, who will be out of the chair at that time, just to give an idea of how we are proceeding.

How much time does the Senator from Minnesota wish before I yield to his colleague?

Mr. WELLSTONE. I say to the Senator from Nevada, 1 minute.

Mr. REID. I yield my friend 2 minutes.

Mr. WELLSTONE. Mr. President, I say to my colleague from Alaska, I have over and over—my position is a somewhat different position than the Senator from Nevada—over and over I have said do not separate Yucca Mountain; you already put $7 billion into it. Why not lay out a comprehensive plan about how you are going to transport this safely to Yucca Mountain? That has been my issue over and over. I have asked the Department of Energy when will there be such a plan? Two years? Three years? Four years? I think we are now talking about several years in the future.

I want to make it crystal clear to me that to vote for Yucca Mountain without those assurances, without the assurances about how it is going to be done safely, without the input of local communities, without the commitment that people will be trained, without any of those assurances whatsoever, it seems to me to be not responsible. That is my first point.

My second point is to one more time say to my colleague and say to all colleagues, though there are those who would have us believe Yucca Mountain will eliminate Minnesota's nuclear waste, as a matter of fact, according to the draft environmental impact statement by the DOE, we still will have 111 and 344 metric tons of high-level nuclear waste in Minnesota onsite at Monticello and Prairie Island.

I yield the floor.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Madam President, a little simple math: 77,000 tons now exist. They can move at most 3,000 tons to someplace; let's say Yucca Mountain. These reactors produce over 2,000 tons. I repeat, the math is not very much. The big lie has been the fact that they say they are going to have only one repository. They are still going to have 131 repositories. That is the way it is going to be. This is a big lie they have perpetuated for many years now, and it is absolutely false that they are going to have one repository. They will continue to have 131, plus the mobile Chernobyls that will be all over America on trucks, barges, and trains.

I yield 10 minutes to the Senator from Minnesota.

The PRESIDING OFFICER. The Senator from Minnesota.

Mr. DAYTON. I thank the Chair.

Madam President, I thank my very distinguished colleague from Nevada for granting me time. I join with my senior colleague from the State of Minnesota who spoke very eloquently before me. I have come independently to the same conclusion as he that I will vote against designating Yucca Mountain as a national nuclear waste repository at this time.

I do so because there are simply too many unanswered questions, untested designs, and unproven procedures to approve a project that has such enormous consequences.

Building a safe and secure storage site at Yucca Mountain and then filling it with some 77,000 tons of nuclear waste will take the next 30 to 40 years. That is the rest of my generation's lifetime.

Throughout those three and four decades, the design, the construction, the loading, the unloading, and the safe transportation of over 150,000 pounds of extremely poisonous nuclear waste must all be done perfectly—at least almost perfectly. One accident, one rupture, one attack would have devastating effects on the lives of people today and for generations to follow, as one look at a victim of the Chernobyl nuclear accident would confirm.

That is the easy part, those 30 to 40 years. Now those 150,000 pounds or as much as 200,000 pounds of radioactive waste has to be stored, contained, and isolated perfectly—almost perfectly—for thousands of years.

That it must be nearly perfect does not mean it is unattainable or unsustainable, but it does mean that the standards for approval must be very high. The standards of reliability, of proven technology, of public safety must be extraordinarily high. They must be met and maintained with certainty, and that certainty must be guaranteed to the American people.

This project is nowhere near that standard today, not even close. That is why we should not even be considering the approval we are being required to give or to deny today. This is not what the law proscribes.

The law states, as it has for the last 20 years, that within 90 days after Congress's final approval, which will be today if this body so decides, the Department of Energy shall submit its application to the Nuclear Regulatory Commission.

According to the Secretary of the Department of Energy, the Department is at least 2 years or more away from being ready to submit that application. According to the private project manager, Bechtel Corporation, DOE is 4 years or more away from being able to submit an acceptable application.

I was not here in 1982 when the law was passed, but clearly the lawmakers intended, and I believe wisely so, that Congress's final review of this project would be within 90 days, or very shortly before the Department of Energy made its application to the Nuclear Regulatory Commission; in other words, after all the testing and design and evaluation had been completed. Today we can do nothing more, if we are so inclined, to say it looks OK or it does not look OK. A lot more has to be done.

As the Senator from Nevada pointed out correctly, the Department of Energy has still almost 200 tests and assessments remaining that it agreed, itself, with the Nuclear Regulatory Commission would have to be completed before the Department of Energy could even submit an acceptable application for site construction to the Nuclear Regulatory Commission. Just to develop an acceptable application, it has to complete some 200 more assessments. Then the Nuclear Regulatory Commission has up to 4 years to review. There is no one else who has the expertise beyond ours and is associated with this project who maintains it is even ready to begin to be considered. Why are we put in a position of acting on it today? Why even consider approving it today?

Given those high standards that are necessary, some of the recent critiques of expert advisory boards and commissions are truly alarming. A January 24 letter of this year to Congress by the U.S. Nuclear Waste Technical Review Board stated:

> The Board's view is that the technical basis for DOE's repository performance estimates is weak to moderate at this time.

Weak to moderate is a long ways from perfect.

In a September 18, 2001, letter to the Chairman of the U.S. Nuclear Regulatory Commission, the Advisory Committee on Nuclear Waste documented its review of the Department of Energy's performance modeling called TSTA–SR. The committee's ''principal findings are that this system does not lead to a realistic risk-informed result and does not inspire confidence in the TSTA–SR process. In particular, the TSTA–SR reflects the input and results of models and assumptions that are not founded on realistic assessment of the evidence. The consequence is that TSTA–SR does not provide a basis for estimating margins of safety.''

Others who have written and raised similar questions and concerns. I believe we should say no to the Yucca Mountain site today, not to remove it from further consideration but we should not commit ourselves to a decision that will affect the lives of millions of Americans today and for generations and generations to follow based on insufficient evidence, inadequate testing, incomplete analyses, undocumented strategies. In a sense, the Senate would be put in a position to make that attestation today which

no one could responsibly make about this project, particularly given this level of assurance that the American people deserve.

Finally, as to the citizens of Nevada, they have been remarkably, extraordinarily well served by the two Senators from that State, Senators REID and ENSIGN. We preside in the Senate in inverse proportion to our seniority, which means I—being 100th in seniority—spend as much time presiding as anyone else; I therefore have a chance to observe what is going on in the Senate. The senior Senator from Nevada, Mr. REID, has been unbelievable in his tireless pursuit of every Member of this body to discuss and to reason and implore their recognition of the facts as he has so well articulated. Senator ENSIGN is in his first term and has encountered an enormous responsibility to his State which he has also performed remarkably well.

Regardless of the outcome of today's vote, I cannot imagine any two people who could have possibly done more, tried more, put more of themselves, heart and soul, into doing what they believe with all their fervor is the right thing for the people of Nevada, and I believe for the people of the United States, including the people of Minnesota, which is to vote no against Yucca Mountain as a site today.

I yield the floor.

Mr. MURKOWSKI. Madam President, before I yield to the chairman of the Energy and Natural Resources Committee 7 to 10 minutes, I point out that for the past several decades we have moved nuclear waste safely in this country. We have had 2,700 shipments in the past 30 years. We have shipped 1.7 million miles. We have not had a single harmful release of radioactivity. This is substantiated by the testimony in the committee. Both the Regulatory Commission and the Department of Transportation, the agencies responsible testified that the waste can be ''safely and securely transported.''

I yield the floor.

The PRESIDING OFFICER. The Senator from New Mexico.

Mr. BINGAMAN. Madam President, I appreciate my colleague from Alaska yielding me a few minutes to express my views on this issue.

We are in a debate now about whether to proceed to consider S.J. Res. 34 which would approve President Bush's recommendation of Yucca Mountain as the site for the development of a nuclear waste repository. The resolution does not authorize construction of a repository. Similarly, it does not authorize the transportation of nuclear waste to Yucca Mountain. What the resolution does do is allow the Department of Energy to apply to the Nuclear Regulatory Commission for a license to begin construction of the repository. The Department of Energy still needs to persuade the Nuclear Regulatory Commission that the repository would be safe before construction could begin and before shipments to the repository could begin. Failure to approve the resolution that we are talking about, S.J. Res. 34, would terminate the Nation's nuclear waste program.

The Nuclear Waste Policy Act of 1982, passed before I came to this Senate, gave the Governor of Nevada the power to veto the President's site recommendation, and the Governor of Nevada exercised that authority in April. If the President does not join the House of Representatives in voting to override the Governor's veto by the 27th of this month—this July—the Governor's veto stands. If the Governor's veto is sustained, either the waste will stay where it is, in temporary aboveground holding tanks at 72 nuclear powerplant sites and 4 Department of Energy nuclear weapons plants in 39 States, either it stays where it is in those locations from now on, or Congress will have to pass a new law to authorize the Department of Energy to search for a new site, leaving the waste where it is safe enough in the short run.

I am not one who is saying there is an imminent health risk or safety risk from leaving the waste where it currently is in the short run. However, it is not an acceptable long-term solution. It would require constant monitoring where it now is and frequent replacement of the storage containers for thousands of years, or the waste will escape into the environment. That is based on the expert testimony we received in the committee hearings.

Looking for another site, without allowing the Nuclear Regulatory Commission to consider Yucca Mountain, to consider an application for a license to use Yucca Mountain, is not a realistic course of action. We have spent 20 years; we spent $4 billion looking at Yucca Mountain already. No one has found a technical or scientific reason that makes it unsuitable as yet. We are not likely to find a better site next time, but, of course, if the Nuclear Regulatory Commission determines that another site has to be found, then we can take on that task.

The Committee on Energy and Natural Resources, which I chair, of which my colleague from Alaska is the ranking member, carefully considered the arguments against the repository that have been raised by opponents of the project. I am the first to admit that not all of the questions that have been raised by the opponents have yet been adequately answered. They have not been. Many of those are questions, though, that are best answered by the Nuclear Regulatory Commission in its licensing procedures and nothing in the record before us justifies a decision, in my view, to terminate the program at this stage.

The hearing record that we compiled in the Energy Committee supports approval of the resolution and it supports allowing the waste program to continue. While not prejudging whether it will approve a license application for Yucca Mountain, the Nuclear Regulatory Commission itself—and we had the Commission members there testifying before our committee—testified that they believed nuclear waste can be safely transported and safely buried at a repository. Not necessarily this one—that will be a decision they will make in the future—but at a repository.

The Nuclear Waste Technical Review Board testified that:

> No individual technical or scientific factor has been identified that would automatically eliminate Yucca Mountain from consideration.

The Environmental Protection Agency testified that the radiation protection standards that will apply to this repository are ''among the most stringent in the world.'' If the repository complies with them it ''will be fully protective of public health and the environment.''

That is ''if'' the repository complies with these standards. As I say, that is a decision the Nuclear Regulatory Commission will make in the future.

In addition to these agencies of the Federal Government, we also heard from the U.S. Geological Survey. They stated:

> The scientific work performed to date supports a decision to recommend Yucca Mountain for development of the nuclear waste repository [and that] no feature or characteristic of the site . . . would preclude recommending the site.

So based on this record, the committee found no reason to terminate the program.

The National Academy of Sciences has said:

> [G]eological disposal remains the only scientifically and technically credible long-term solution available to meet the need for safety without reliance on active management.

We have a responsibility to dispose of these wastes rather than leave them for future generations to deal with. I do not favor just kicking this can down the road and leaving it for someone else to act.

In sum, a vote for the motion to proceed on the resolution is not a final vote to put nuclear waste in Yucca Mountain. It is a vote to let the Department of Energy apply for a license, a vote to let the technical experts at the Nuclear Regulatory Commission decide whether Yucca Mountain is, in fact, safe.

A vote against the resolution is a vote to stop the program in its tracks, to leave the waste where it is with no alternative strategy for finding another site, and, frankly, with little or no chance of putting together a political consensus to find another site in the foreseeable future.

On the basis of those reasons, I urge my colleagues to approve the motion to proceed and to approve the resolution.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. I will yield to my friend from California in a minute, but this is another one of the fallacies of this

whole debate. Isn't it too bad we have worked on it all this time, and if it doesn't go through, what are we going to do?

Chairman Meserve of the Nuclear Regulatory Commission said less than a month ago:

> If Yucca Mountain were to fail because of congressional action, that does not mean all of a sudden from a policy point of view that the country is at a stalemate and is confronting imminent disaster.

Of course he would say that. We have nuclear reactors around the country that are using their facilities to store the stuff onsite—safely, in dry cask storage containment. You don't have all the worries of transportation. It is safer than trying to haul this stuff past our schools and homes. This is an argument that is without foundation. It would not mean the end of the nuclear world at all.

I yield 10 minutes to the Senator from California who, I would state, is the chair of the environmental task force Senator DASCHLE has set up and who has done an outstanding job pointing up the environmental problems we have in America today.

The PRESIDING OFFICER. The Senator from California.

Mrs. BOXER. Madam President, it is indeed an honor to stand with my friend from Nevada on this issue because there can be no higher calling that we have than to protect the health and safety of the people we represent—no higher calling.

It seems to me very interesting that, as we are about to address a very important subject of corporate irresponsibility and try to fix the mess that is happening on Wall Street, we would be disrupted from that task to go to an issue such as this, which is so very harmful to our people. I am going to take some time to explain it.

My State of California is one of the most affected by the Yucca Mountain project because Yucca Mountain is only 17 miles from the California border and from Death Valley National Park. Scientific studies have shown that the regional ground water aquifer surrounding Yucca Mountain discharges into Death Valley because Death Valley is down gradient from Yucca Mountain. If the ground water is contaminated, that will mean the demise of the park and the surrounding communities.

The tests that have been done on the site are not what we would want to see. We see leakage; we do not see dryness. We see problems with Yucca Mountain that would lead most people to assume there will be a problem with leakage into the ground water. It is an absolute travesty waiting to happen to my State.

The long-term viability of the fish, the wildlife, and the human population is dependent on this aquifer. Water is life in the desert. Water quality must be preserved. Given the threat posed by Yucca Mountain, I have opposed it, and that was before 9–11.

Since 9–11, we have a whole other area of concern and that is taking this waste from all over the country and putting it on trucks or trains and shipping it across this country. It is an absolute disaster waiting to happen. This is so hot that it has to be cooled for—I say to my friend from Nevada, Senator REID, am I correct in saying that waste is so hot that it has to be cooled? And for how long does it have to be cooled?

Mr. REID. I will respond to my friend from California. National Geographic this month has a wonderful article on nuclear waste. Among other things, it confirms what we have known for a long time. The nuclear reactors in America and around the world are 97 percent inefficient. That means you put in a fuel rod in a nuclear reactor and when they take it out, it still has 97 percent of its radioactivity. It has only used 3 percent.

The nuclear reactors are so inefficient they have to take them out of the reactors and put them in water. You cannot take them out of the water for at least 5 years for them to cool down.

Mrs. BOXER. Five years.

Mr. REID. Five years for them to cool down. So I say to my friend from California, all this talk about we need to have one site, we don't need to have 131 sites—the fact is, they are always going to have spent fuel at the sites of the power-generating facilities.

Mrs. BOXER. I thank my friend. I knew this waste was so hot that it would have to be cooled down, but I wasn't aware that it was for 5 years.

Post 9–11, you would think this administration would think twice, or three times, or six times, before they would go ahead and give the order for this waste to move. We have given the airlines billions of dollars. We are spending so much to make airports safe and here we have this administration, the one that tells us we are in a war—there is not a speech this President makes that he doesn't remind us that we are in a war—is ready to put this kind of material on our roads.

I am just incredulous. The only thing I can come up with is, who is really behind all of this?

I have a list of some of the people who are pushing for this. Let us put that on the floor since we are talking about corporate power this week.

We have the Nuclear Energy Institute. There are 260 companies in the Nuclear Energy Institute pushing this. They include Enron, First Energy, Bechtel, Duke Energy, and General Electric, to name a few. There are a lot of special interests—260, to be exact—pushing this.

But where are the people? The people will be living in fear, I guarantee you, when this starts.

Let me show you a map which I think my colleague must have shown before. Let me show you a map first of just one area, Sacramento. The red area is within 1 mile of one of the proposed routes. The yellow area is within 3 miles of the proposed route, and the light yellow is within 5 miles.

If you look at all of this, you see these little arrows. They are actually schoolhouses. These are the schools located so close to this traffic. The H's are the hospitals. We have 167 schools that are within 5 miles in this area. There are seven hospitals within 5 miles.

The PTA has sent us a letter against this project.

Where are my colleagues? You would think 9/11 never happened. You would think 9/11 was just something in a movie. The PTA has basically told us: Don't do this until you have a plan that you can prove is safe.

Mr. REID. Madam President, will the Senator yield for a question?

Mrs. BOXER. I would be happy to.

Mr. REID. The Senator mentioned the 260-plus companies that make up NEI. Is the Senator aware that there is a lawsuit now pending to have the Vice President of the United States divulge who he met with at those energy companies and what they talked about? Is the Senator aware of that?

Mrs. BOXER. I am certainly aware of that.

Mr. REID. I felt so strongly about that issue that I filed an amicus curiae brief joining with the GAO to have him divulge that information. I will bet a significant number of the 261-plus companies met with him to develop the energy policy this administration came up with. Does the Senator suggest that is probably true?

Mrs. BOXER. Given the track record of this administration in terms of its energy policy and the President's lack of anything very exciting in terms of how we are going to regain the confidence and trust of the people, it is very possible—indeed, probable, in fact—that these companies, or certainly their representatives, met with the Vice President.

I will tell you, when that comes out, we will know even more why, even after 9/11, they had this plan.

This is just one area—Sacramento. I want to show you Los Angeles. We are not talking philosophy or ideology. We are talking about the hottest, most dangerous waste known to humankind coming near schools and hospitals in my State and in almost every other State.

Again, the red area is within 1 mile of the route. The yellow area is within 3 miles. The light yellow area is within 5 miles. We have 446 schools within 5 miles of these routes. Is this what we owe those little kids? Is this what we owe them? Are they going to close the school down when they transport this near by? There are 23 hospitals within 5 miles.

I am amazed we are debating this issue. I am amazed we are debating this issue. The Department of Energy doesn't tell us what the final plan is. You know why? It is because of the outcry in the country when that final plan comes forward.

Attorney General Ashcroft has said we should worry about a ''dirty'' bomb. And we all do. We already know it has been disruptive. That is a ''dirty'' bomb. That is material that doesn't even come close to the danger of this material.

I want to give you the facts about what happens in California with the transportation of this waste.

We have 35 million people in our State. Seven million people in California live within 1 mile of the proposed route.

I ask my colleague for 5 more minutes.

Mr. REID. I yield the Senator from California 5 more minutes.

The PRESIDING OFFICER. The Senator is recognized for 5 more minutes.

Mrs. BOXER. There are 231 hospitals within 1 mile of the proposed route. There are 3,500 schools within 1 mile of the proposed route. Nuclear waste shipments in California over the life of the project, if done by truck, will be 14,000-plus; if done by train, 13,000-plus; 2,040 metric tons of nuclear waste at facilities throughout California now—which means that even with the Yucca Mountain we are going to have nuclear waste in the State, which is also the case with most of our States.

Our Attorney General had a press conference about the potential of a ''dirty'' bomb. We worry about where the terrorists are going to get this material. This administration has been backing the transportation of the most dangerous nuclear waste and not even mentioning 9/11. It is almost like a Rip Van Winkle situation when it comes to Yucca Mountain. Well, we have done it; we spent the money; and, we have invested it. It doesn't matter—9/11, or anything else. You could have another terrorist and it would still be here for Yucca Mountain.

Loud special interests are behind this vote. That is the only way you can come to any other conclusion.

I will tell you some of the people who oppose this. I mentioned the PTA. I will give you some more: The Alliance for Nuclear Accountability, American Land Alliance, American Rivers, American Public Health Association, Clean Water Action, Environmental Action Foundation, Environmental Defense, Fellowship of Reconciliation, Friends of the Earth, and the Government Accountability Project. It goes on: League of Conservation Voters, International Association of Firefighters.

Do you want to be a fireman and get called to a fire when one of these accidents happens? The Department of Energy has said they know already there are going to be accidents. Is that 100 accidents? They predict that already.

The International Association of Firefighters knows what that could mean to their lives.

Who are we fighting for here? I say to my colleague, this is a moment of truth for every person here.

You could look at the United Church of Christ, United Methodist Church, Wilderness Society, and the Women's Legislative Lobby in Washington. These are people who have spoken out.

I ask unanimous consent to have this entire list printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

ORGANIZATIONS OPPOSED TO THE YUCCA MOUNTAIN NUCLEAR WASTE DUMP

Alliance for Nuclear Accountability, Seattle, Washington, American Lands Alliance, Washington, DC, Americans for Democratic Action, Washington, DC, American Rivers, Washington, DC, American Public Health Association, Washington, DC, Center for Safe Energy, Earth Island Institute, Berkeley, California, Clean Water Action, Washington, DC, Defenders of Wildlife, Washington, DC, Earthjustice, Oakland, CA, Environmental Action Foundation, Takoma Park, Maryland, Environmental Defense, New York, NY, Environmental Working Group, Washington, DC, Fellowship of Reconciliation, Nyack, NY, Free the Planet!, Washington, DC, Friends of the Earth, Washington, DC, Government Accountability Project, Seattle, WA, Grandmothers for Peace International, Elk Grove, CA.

Greenpeace, Washington, DC, Honor the Earth, St. Paul, Minnesota, Indigenous Environmental Network, Bemidji, MN, Institute for Energy and Environmental Research, Takoma Park, Maryland, International Association of Fire Fighters, Washington, DC, League of Conservation Voters, Washignton, DC, League of United Latin American Citizens, Washington, DC, National Education Association, National Environmental Coalition of Native Americans, Prague, OK, National Environmental Trust, Washington, DC, National Parent Teacher Association, National Wildlife Federation, Washington, DC, Natural Resources Defense Council, Washington, DC, Nuclear Information and Resource Service, Washington, DC, Pax Christi USA, Erie, PA, Peace Action, Washington, DC, Physicians for Social Responsibility, Washington, DC.

Presbyterian Church (USA), National Ministries Division, Washington, DC, Psychologists for Social Responsibility, Washington, DC, Public Citizen, Washington, DC, The Safe Energy Communication Council, Washington, DC, Scenic America, Washington, DC, Sierra Club, Washington, DC, Union of American Hebrew Congregations/Religious Action Center of Reform Judaism, Washington, DC, United Church of Christ, Office for Church in Society, Washington, DC, The United Methodist Church, General Board of Church and Society, Washington, DC, U.S. Public Interest Research Group, Washington, DC, The Wilderness Society, Washington, DC, Women's International League for Peace and Freedom, Philadelphia, PA, The Women Legislators' Lobby (WILL), Washington, DC, Women's Action for New Directions (WAND), Washington, DC, 20/20 Vision, Washington, DC.

Mrs. BOXER. Madam President, I want to conclude and say I could show you other charts that show the impact on other States. But I have made my point. This nuclear waste is going to go by schools, it is going to go by hospitals, it is going to go by our families, it is going to go by our children, it is going to go by our homes, and it is going to go by our businesses. And post-9/11 we don't even have the final plan.

I am proud to stand with my friends from Nevada. I am going to be in this fight if they need me because I believe there are some moments on this floor when you have to step up and realize you are here for a brief time, but decisions we make can come back to haunt us. I hope today people will think about that and vote with my colleague from Nevada.

I yield the floor.

The PRESIDING OFFICER. The Senator from Alaska.

Mr. MURKOWSKI. Madam President, let me point out a couple of facts that perhaps some Members have not reflected upon.

There are no proposed routes. There are only potential routes.

While the Senator from California points out routes around Sacramento or Los Angeles, they have simply taken every major route that has the potential of moving nuclear waste and said this is, in fact, a proposed route.

That is hardly accurate. It is fair to say there is no Yucca transportation route yet. What opponents have done is they have selected every major highway in the U.S. and simply called it ''proposed.'' That is certainly stretching things to suggest it is going to go by hospitals, it is going to go by schools.

Clearly, there are efforts being made by the responsible agencies. If we create these agencies, we have the oversight. If we do not have the faith in them to do their job—the Department of Transportation, the Department of Energy, the Nuclear Regulatory Commission—are we to micromanage, if you will, when waste has been moving safely across this country for decades, and to suggest that somehow we cannot move it safely?

California is 17-percent dependent on nuclear energy. I am looking at a spreadsheet. Cumulative spent fuel, in California, at the end of the year 2000, was 1,954 metric tons, not including 98 metric tons from the San Onofre Nuclear Reactor. There are 403 metric tons at shutdown reactors, 11 metric tons in dry storage. It is going to stay there unless it is going to be moved somewhere. It has to be moved by a route. It has to be moved safely. Is it going to be moved by train or by highway?

Clearly, we have moved 2,700 shipments in 30 years 1.7 million miles, and with not a single harmful release of radioactivity. We have had shipments to WIPP in New Mexico—900 shipments, since 1997, 900,000 shipment miles, and not a single harmful release of radioactivity.

Do you think we are the creators of moving this stuff? In Europe there has been 70,000 tons shipped safely over 25 years. So this isn't something that has just happened.

We have moved high-level nuclear waste across this country. Now we are talking about moving waste out of our reactors. We are talking about doing it responsibly.

Some of these arguments—we have heard the term ''red herring.'' Well,

this is a ''nuclear herring,'' if you will. Maybe it glows in the dark. But it certainly suggests, in this debate, that somehow we are doing something new in this country, that we are doing something that is high risk in which we have not had any experience.

Again, in reference to bringing this discussion in the parameters, we are not moving it to Yucca Mountain today. We are simply authorizing the administration to proceed with the license process which will address the legitimate transportation questions that are coming up in this debate.

I yield the floor to my good friend from Wyoming.

How much time would the Senator from Wyoming require?

Mr. THOMAS. I think about 10 minutes, please.

Mr. MURKOWSKI. I yield 10 minutes to the Senator.

The PRESIDING OFFICER (Mr. CARPER). The Senator from Wyoming is recognized.

Mr. THOMAS. Mr. President, this is an issue we have talked about for a good long time. Some of the things I have heard today are quite different than what we have talked about before. Nevertheless, everyone is entitled to their own views.

I think, as has been mentioned, we ought to remind ourselves what the purpose of this particular vote is about. It is to make it possible for the Secretary to apply for a license to construct a site at Yucca Mountain. If this fails, then ever since the 1980s, 24 years of work, and $4 billion worth of expenditures will be halted and nothing more will happen.

This is not the final issue to be talked about. This is not the issue of transportation. This is the issue of whether or not to move forward and license the site, which will then provide the opportunity and the necessity of moving on to other issues, such as defining the transportation routes and dealing with the safety of transportation.

I think we ought to keep in mind what we are doing here and that is to authorize them to move forward in licensing the site. The site, of course, is one of the most important issues before us. It has been said a number of times that there are 131 different sites where waste is stored. Not all of those sites will disappear, of course, but many of them will. Those that have been Government used, that are not continuing to be used, will be gone. We will have fewer sites.

I do not hear anyone talking about solving the problem. All I hear about is avoiding coming to a decision. I think we need to ask ourselves which is better in terms of safety: to have it generally in one place or to have 131 different sites?

Talking about trying to have protection and security, how much security do you think there is in every one of these sites? If you are talking about September 11, you have to talk a little bit about having all these sites. We are trying to consolidate some.

So it has been interesting to hear the kinds of reactions that we have had. The site is there, of course, because Yucca Mountain is 90 miles from the nearest population centers. It is one of the most remote places in the country. The climate is conducive to storage. There are multiple national barriers in order that tunnels can be stored. There is great depth, 2,600 feet deep underneath, an isolated basin.

So this is something that has been selected with a very great deal of study from a number of places. This is the one that was decided upon to be the best. So that is where we are.

It is interesting, all we hear about are problems. I think it is up to us to talk about some solutions. I hope we can do that. In fact, I think to say this Energy Department material is not useful is a stretch. Certainly this material has been studied. Experts have put this information in there.

Some of the information we are hearing lacks a little bit. At the hearings we held, there was a gentleman who had been the past director of highway safety who was talking about highways. I asked him who he was working for. It turned out he had been paid by the State of Nevada. Talk about people being in support of the idea and causing people to have their positions the way they are.

Let me talk a minute, though, about transportation. Obviously, transportation could very well be going through our State of Wyoming, although, as the Senator from Alaska points out, those decisions have not been made. Everyone is talking about where it is going to go. That has not been decided. In fact, I have written a letter to the Secretary of Energy to ensure, as we move through this particular decision, that we will move on, then, to an equally difficult decision about transportation, and also to get assurance—which he has assured us—that the Governors and officials in the States will coordinate and will be cooperative workers in terms of deciding what the routes are.

In any event, we have talked a little bit about the history of transportation. It is very impressive. We have had 30 years of transportation of nuclear waste of various kinds without an incident. We have had that over 1.5 million miles. It is handled safely.

I was surprised. At the hearing, they had a sample on the floor of the kinds of containers that spent nuclear material is in. I had no idea, frankly, what it was. But they are in solid pellets, approximately the size of a pencil eraser. And they are secured in multiple layer metal tubes. They are hard, and they are solid.

Nuclear waste is not fluid. It is not a gas. It will not pour or evaporate. It is in these big, hard vats that are set up for it. Nuclear waste, nuclear fuel does not burn, as a matter of fact. It is not flammable, even if it is engulfed in fire.

Spent nuclear fuel cannot explode. We sort of get the notion that it is going to go up in a big puff. That is not the case. It is transported in strong thick-walled casks, casks that have been dropped from 30 feet in a free fall from helicopters to be tested. And they have a puncture test with a special way to do it. They have flatbed trucks that have been smashed into a 700-ton concrete wall at 80 miles an hour.

There is safety here. Safety, of course, is a high issue for all of us. No one would suggest it should not be. Most of it will be done by train, not on the highways. These are the things we will have to deal with and we will deal with over a period of time.

We should start, of course, with dealing with the question. We have agreed, in 1982, to take care of this waste, particularly in the commercial uses that have been there. They have been taxed $17 billion to do something with it. What they are doing with it now is not the safest thing that can be done.

I know when you talk about nuclear, everybody swells up, but it is interesting to also recall that Illinois, for example, generates over 30 percent of their electricity with nuclear. Of course, there is nuclear waste. But we need to do something with it. We are going to be moving more toward it.

On the other side, it is one of the cleanest kinds of electric generating fuels we can have. I guess if I have been impressed by anything in this discussion, it is that we haven't really dealt with the problem, How do we solve it? What we have talked about, what we hear about almost all the time, is how do we avoid making a decision on an issue that is there, and one that is obviously going to be there until we do something about it, until we follow through on what we agreed to do in 1982 and have not done since, and haven't heard much about, as a matter of fact. We spent $4 billion in Nevada. We didn't hear much about that. Fine.

I hope we can go ahead and deal with this, support this portion of the total decision that needs to be made, move forward on this site, and then deal with the other issues that come before us.

I yield the floor.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Mr. President, I will yield to my friend from Michigan in a second. I do want to say, however, that of course the routes Senator BOXER talked about are the routes proposed by the DOE in their final environmental impact statement. They have said they are not sure this is the final transportation plan they will have, but that is what they have said so far.

Jim Hall, former head of the National Transportation Safety Board, said in testimony: What I find more shocking about the Yucca Mountain project is that DOE has no plan to transport spent nuclear fuel to its proposed repository.

Secretary Abraham testified last week that DOE is just beginning to formulate preliminary thoughts about a transportation plan, even though in

the final environmental impact statement they did give us these routes about which Senator BOXER and others have talked.

Puncture tests? Sure, there are puncture tests. We know a shoulder-fired weapon will go through one of those canisters of spent fuel rods. We know that. The tests have been proven. We also know they don't withstand fire. Diesel fuel burns at 1,400 degrees. They have only had these tests go up to 1,200 degrees. If you have a fire and a diesel truck is carrying this, it will breach the container.

The things we are being told simply have no validity. We talk all the time about all this dangerous stuff that has been hauled. Let me tell you about the WIPP facility. The WIPP facility is the waste isolation project in New Mexico. WIPP is the most highly planned nuclear shipment we have ever had. Yet the first shipment went the wrong way, 28 miles the wrong way, and was turned around by the local police department. The DOE satellite tracking system didn't work. The truck was going 28 miles the wrong way. It turned around. It was 56 miles on a road on which they were not supposed to be.

Eighty percent of all traffic accidents are not as a result of anything going wrong with the equipment; it is human factors. That is what this is all about.

No harmful releases of radiation? That is laughable, Mr. President. There have been accidents, and there have been releases over these 2,700 shipments. Some of those have dealt with pounds of stuff, not tons. On one of these trucks, the cannister alone was 10 tons. There have been releases over the years that they have been doing this. The DOE itself says there will be at least 100 accidents. That is in their proposed findings in the environmental impact statement.

Someone can vote against this with goodness in their heart. They are doing the right thing. This is not good for the country.

My friend mentioned France and Germany. They may have hauled a lot of stuff, but they haven't hauled a lot of stuff lately because it has been stopped in its tracks. Germany has given up trying to haul it because people lie down in the streets and chain themselves to railroad tracks.

I yield 10 minutes to the Senator from Michigan.

The PRESIDING OFFICER. The Senator from Michigan is recognized for 10 minutes.

Ms. STABENOW. Mr. President, I thank my colleagues from Nevada for their leadership on this very important issue for all of us. I know my colleagues on both sides of the aisle will join me in saying there is not a more revered Member of this body than our senior Senator from Nevada. I thank him for his leadership, his intelligence, his compassion, and his advocacy on this particular issue as well as many others.

When I was in the Michigan Senate, I helped to lead an effort to stop putting casks along Lake Michigan and our nuclear facilities because of my concern about the waste being along Lake Michigan. I certainly still have that concern. We lost that, and the waste is there.

On first blush, when I was in the House of Representatives, I thought supporting a permanent nuclear storage site at Yucca Mountain was a good idea. I want the waste out of Michigan. There is no question about it. My preference, if we could say, ''Beam me up, Scottie,'' would be to move the waste out of Michigan.

Unfortunately, by very close examination of the facts and information from the Department of Energy, their current documents, I have come to the conclusion that this proposal not only will maintain existing threats to the Great Lakes but will create new ones, new security risks, new environmental threats for the Great Lakes and for Michigan families. I am deeply concerned about that and frustrated because fundamentally I want the waste out of Michigan. But I do not want to create more threats in the process.

It goes without saying that the world has changed since September 11. We know that. We hear that all the time from our President. We say that on the floor of the Senate practically every day. The world has changed since September 11.

Since the tragedies in New York and Pennsylvania and the Pentagon, we have administration officials who daily tell us that we are going to see further attacks. On May 19 of this year, the Vice President stated on ''Meet the Press'' that the prospects of a future terrorist attack against the United States are almost certain and not a matter of if but when. That should be a concern—and I know it is—for all of us. It should in some way be a shadow over every decision we make today in this body for our families, for the families we represent.

On June 10, as we all know—just a month ago—the American people became aware of a plot to potentially detonate a so-called ''dirty'' bomb which could kill thousands of people and send poisonous nuclear matter throughout the air, exposing hundreds of thousands more people to nuclear radiation. This causes me to pause and look at what we are doing in a new light. September 11 and the ongoing war against terrorism has, in fact, put this in a new light for me. I have examined how the nuclear waste from Michigan's storage sites would be transported across Michigan to Yucca Mountain and, unfortunately, I am very concerned there is not a plan by the Department of Energy to protect those shipments from terrorist attack.

I have asked the questions of our State government, I have asked the questions of our Department of Energy, and I am told, as we have heard over and over again, that the Department is only beginning to look at developing a transportation plan and designating transportation routes. Yet we are asked to decide today on this project without that information.

I am also very concerned the Department has not implemented any additional security requirements for transporting nuclear waste since 9–11 to ensure safety and protect the shipments from terrorist attack. In addition, I am very deeply concerned to find that there is no Government agency that has conducted full-scale physical tests of the casks that would be used to transport high-level nuclear waste to Yucca Mountain; nor have these test requirements been reviewed or strengthened to take into account how the casks would perform under a potential terrorist attack.

This is a new day. There are new questions and new tests that need to take place in light of our current reality as Americans.

I am very concerned today, when I pick up the Washington Post and find that they further reveal that the EPA has been keeping under wraps a February 2002 report that concludes that they are not fully prepared to handle a large-scale nuclear, biological, or chemical attack. The EPA is the primary agency for providing support to State and local governments in response to a discharge of nuclear or hazardous materials, and they are not fully prepared to deal with current security threats.

How well prepared will they be once thousands of nuclear shipments begin to travel by our schools, our hospitals, through our communities, our residential neighborhoods, en route to Yucca Mountain.

I also discovered, Mr. President, in my examination of the Department of Energy's own documents, that most of the waste stored in Michigan will never make it to Yucca Mountain. That is a pretty big discovery for me. Most of the waste in Michigan will never make it to Yucca Mountain. As long as nuclear powerplants operate in Michigan, new nuclear waste will have to be stored in cooling pools, as indicated by my colleagues, on the shores of the Great Lakes for 5 years at a time so they can be cooled before they are transported anywhere. Much of the nuclear waste in Michigan will not be moved to Yucca Mountain because Yucca Mountain will reach its full capacity within the first 25 years of operation.

While I want the waste out of Michigan, away from its shores, We have a worst case scenario for the people of Michigan. The nuclear waste will continue to sit on the shores of the Great Lakes and also be traveling on our roads and railways—and, Heaven forbid, even barges on the Great Lakes—past our communities, neighborhoods and schools.

Let me speak to that new threat that, unfortunately, is in the environmental impact statement the Department released just a few months ago,

which raised a tremendous red flag for me. The Department of Energy's final environmental impact statement describes barging nuclear waste on the Great Lakes as a transportation option. Now, in fairness, they indicate that while there could be as many as 431 barge shipments of nuclear waste on Lake Michigan, that is not their preferred option. I am glad that is not their preferred option, but, unfortunately, when writing the Secretary, he would not take it off the table as an option. In fact, he indicated that the Department of Energy ''has made no decision on the matter.''

I cannot imagine putting high-level nuclear waste on barges and sending it across Lake Michigan. There is not a plan in the world that I would support to do that. The answer of the Department on this issue is simply not good enough. I cannot support any plan that includes a transportation option that endangers one-fifth of the world's freshwater supply and the source of drinking water for the entire Great Lakes region.

Mr. President, today's vote, unfortunately, will be the last time Congress will have a real voice on this issue. We certainly can express ourselves as it moves through the regulatory process, but this is the time for us to say, yes, we know enough to move forward or, no, we do not. If we say no, we can ask that more information be given to us, that more tests be done, and that we receive assurances, such as I need, to know that there will not be, under any circumstances, barging on the Great Lakes. We can get that information and then we can proceed again.

This is not the end. We can proceed further—those of us who want more information, more assurances, and want to know that our communities will be safe and the environment will be safe. There is no reason we cannot work on getting those assurances and the plans in place first.

Based on my examination of the Department of Energy's own documents, as well as further information, I do not believe this administration has a safety plan for transporting waste to Yucca Mountain that protects my citizens, Michigan families, or the Great Lakes. Therefore, I cannot support the Yucca Mountain resolution.

The PRESIDING OFFICER. The time of the Senator has expired.

The Senator from Alaska is recognized.

Mr. MURKOWSKI. Mr. President, let me point out that the State of Michigan is currently 18.2 percent dependent on nuclear energy. Currently, in the State of Michigan, there are 1,627 metric tons of spent fuel of which 58 tons is in shutdown reactors, and 177 tons is in dry storage.

As a consequence of the alternatives we face, the recognition is obvious that if we do not move this waste, it is going to stay where it is. The nuclear power generation in Michigan consists of four nuclear units: Cook 1 and 2, Fermi 2, and Palisades. As a consequence of the recognition that there are six storage locations covering the 1,625 metric tons, we have to address the reality of how much longer the nuclear plants can continue to operate without a permanent repository. That is what the contemplated vote is all about.

Questions have been raised by Members concerning the routing. Again, I point out the Nuclear Regulatory Commission approves all routes and security plans with States and tribes, including the Department of Transportation, Department of Energy and, of course, the Nuclear Regulatory Commission. For security, armed guards are required through heavily populated metropolitan areas if they are indeed selected. At the discretion of the Governor of each State, all shipments are required to have 24-hour escorts.

Tracking: The Governor of each State is notified in advance of spent fuel shipments. These shipments are required to have an escort into the central transportation command facility every 2 hours to ensure that problems do not exist. All shipments are closely coordinated with local and Federal law enforcement agencies.

As far as training, States and tribes have and will continue to receive Federal support for specific training. On the question of what is the Government doing with emergency preparedness assistance, since 1950, the Federal Government has had its own experienced teams of emergency responders. Emergency responders receive assistance and training from the Department of Energy, Department of Transportation, FEMA, and others, and are specially trained and prepared to respond to a variety of incidents and accidents, and DOD will continue to provide training to emergency responders. The Department has directly trained over 1,200 responders.

In addition, DOE has trained instructors and have provided training to additional emergency personnel in the State, tribal, and local response groups. Training materials have been distributed.

It is fair to say efforts are made to train local government entities. There is a misconception somehow that if there is an accident, there is likely to be a fire, some kind of an explosion. That is not the case. If, indeed, there is a penetration of a cask, which is extraordinarily unlikely, there will obviously be an awareness, and the area will be roped off. The material is very heavy. It does not blow around in the wind. Unless you get in and mess with it, why, it can be cleaned up by experienced personnel.

This is not a matter, as some suggest, that if there is a penetration, there is going to be a nuclear explosion of some kind.

Mr. President, I yield the floor and ask how much time is remaining on this side.

The PRESIDING OFFICER. The Senator has 62½ minutes remaining.

Mr. MURKOWSKI. I thank the Chair.

Mr. REID. Mr. President, I yield 10 minutes to the Senator from Missouri, Mrs. CARNAHAN.

The PRESIDING OFFICER. The Senator from Missouri is recognized for 10 minutes.

Mrs. CARNAHAN. Mr. President, when I speak to people throughout Missouri, security continues to be their primary concern. They are concerned about threats from abroad and about security in their daily lives—job security, health care security, retirement security.

In this day and age, when we are making extraordinary efforts to protect ourselves, people are more fearful than ever about shipments of nuclear waste through their neighborhoods and communities.

In Missouri, this is especially a sensitive issue because of our recent history of nuclear waste shipments. Two summers ago, Governor Carnahan succeeded in getting a shipment rerouted around Missouri. But last year, the Department of Energy scheduled another shipment to go through Missouri. The route the Government selected went through the most populated areas in the State, through the heavily populated suburbs of St. Louis, straight through Columbia, past Independence, and then on through Kansas City.

The Government's plan would ship nuclear waste along Interstate 70 and other roads that are crowded and in disrepair. Interstate 70 through Missouri is one of the oldest stretches of Federal interstate highway in the Nation. The newest stretch is 37 years old. The oldest stretch is 46 years old. But the original design life was only 20 years.

I–70 is one of the most vital transportation corridors in the Nation. It is in need of more than just basic maintenance. It is in need of total reconstruction.

Everyone who travels over I–70 knows it is in horrible condition. The number and severity of traffic-related accidents along I–70 between Kansas City and St. Louis have grown steadily in recent years and will continue to grow with projected increases in travel. Unless the road is repaired and expanded, conditions will continue to deteriorate, congestion will increase, and transportation costs will rise.

There are two scenarios: Either I–70 will remain in poor condition or, as I would prefer, it will undergo massive reconstruction over the next decade. Either way, I–70 should not be the superhighway for nuclear waste.

If Yucca Mountain is built, that is exactly what will happen. Preliminary estimates by the Department of Energy show that within a 25-year period, over 19,000 truck and 4,000 rail shipments of nuclear waste will go through Missouri on their way to Yucca Mountain. That is two trucks a day every day passing through St. Louis, Boone County, Jackson County, and many other counties across the State.

Unfortunately, the manner in which last year's shipment of nuclear waste through Missouri was conducted does not inspire confidence in the way the Department of Energy handles these shipments. While the State of Missouri and the Department of Energy were negotiating about this shipment, the Department announced that it would not allow waste from a research reactor in Columbia, MO, to be shipped out of State.

The linkage of these two issues was inappropriate. While Governor Holden was negotiating safety protocols, the Department was playing politics with nuclear waste.

I intervened to ensure these issues would be handled separately so that the Governor could continue to insist upon proper safety arrangements for the shipment.

After all this, the shipments showed up in St. Louis at rush hour and would have passed through Kansas City during a Royals baseball game. The shipment had to be held at the border for a number of hours.

In my view, we have not focused enough on the transportation issue to approve the Yucca Mountain site at this time. The transportation casks have not been thoroughly tested for possible terrorist attack. The final transportation routes have not been selected, and security of the truck and train shipments has not been studied. There are no concrete plans for training emergency responders in local communities along transportation routes. And, as I mentioned, the roads remain in sad repair.

All these issues need to be properly addressed before I will consider voting to approve the Yucca Mountain site. It is more important to make the right decision than it is to make a quick decision.

Every nuclear reactor in the country has onsite spent fuel. These storage facilities will continue to be used even if the repository at Yucca Mountain is built because the spent fuel that comes out of the reactor must cool for approximately 5 years. Most of these facilities will be upgraded and expanded if and when necessary, and in Missouri our single nuclear powerplant will not experience shortage difficulties until 2024. So there is plenty of time to upgrade and further expand its storage facility if necessary.

Before committing to ship tons of nuclear waste through the heartland, I believe we should spend much more time in determining whether we can transport this waste safely and keep these shipments away from our most densely populated communities. I am confident that is what the people of Missouri want.

The PRESIDING OFFICER. The Senator from Alaska.

Mr. MURKOWSKI. Mr. President, I see a couple of Senators, Mr. CRAPO and Mr. KYL. I want to point out to the Senator from Missouri that nuclear energy includes about 13 percent of the power generated in Missouri. Coal is 82 percent. It is about 95 percent in combination.

Mr. President, 388 metric tons of spent fuel are currently in the State of Missouri. As a consequence, I think it is important—and if I can have the attention of the Senator from Missouri—to point out this transportation route because currently the shipment of waste, this transuranic waste, goes out of Missouri and routes under this highway system into New Mexico. There is no proposed existing transportation route that will be taking the waste through Missouri. This waste is currently at the University of Missouri research reactor. It goes out on 70, up on 55, comes over on 880, and down on 25 into New Mexico.

My point is, while it is obviously possible that the Department of Energy, the Nuclear Regulatory Commission, and the Department of Transportation would choose other routes, it is clear to point out that currently there has been and there is no logic to suggest there would be a movement of waste through the State of Missouri when currently transportation routes to WIPP do not go through Missouri; they actually remove waste from the State of Missouri.

We should keep these discussions in the context of accuracy relative to what is contemplated vis-a-vis the current transportation route.

I yield to my friend from Idaho for 10 minutes.

The PRESIDING OFFICER. The Senator from Idaho is recognized for 10 minutes.

Mr. CRAPO. Thank you, Mr. President. I thank the Senator from Alaska for his graciousness in yielding me this time.

I rise today to add my voice and my strong, unequivocal support for Senate Joint Resolution 34, a resolution approving development of a permanent nuclear waste repository at Yucca Mountain, NV, notwithstanding the disapproval of the Governor of Nevada.

Before I get into my main remarks, I wish to talk a moment about my colleague from Idaho, Senator LARRY CRAIG, who, as a member of the Energy Committee in the Senate, has been tireless in his efforts to make certain that the procedural maneuvers and the substantive debate over this issue move forward expeditiously and that we address the issues that the law provides so we can make certain the Yucca Mountain facility is able to maneuver forward into the permitting process.

As many of those who have debated today have already stated, this debate is not about whether to open the Yucca Mountain facility so much as it is about allowing the process of permitting to begin to take place. As my colleagues know, this is the required legislative procedure spelled out by the Nuclear Waste Policy Act of 1982.

In 1982, 20 years ago, Congress made the decision we should begin resolving this issue and set forth a series of legislative and other procedures that must be followed to assure that every question—that of national security, safety, of individual State rights, and all the other issues—were adequately addressed as we deal with this critical issue. Over those 20 years, the importance of dealing with this issue has grown.

Now the issue of the role of nuclear power in the portfolio of America's energy policy and the manner in which we will resolve the handling of the spent nuclear fuel has become a national security issue, in my opinion.

I come to this debate with a long history of working on this issue. The State of Idaho, which I have the honor to represent, hosts the Department of Energy's Idaho National Engineering and Environmental Laboratory, NEEL, which currently stores a large volume of spent nuclear fuel and high level nuclear waste.

The INEEL now has 56.5 percent by volume and 11 percent by weight of all spent nuclear fuel in the DOE complex. This spent nuclear fuel includes the Navy's spent nuclear fuel, the spent fuel and rubble from Three Mile Island and other commercial power plants, foreign research reactor fuel that is coming to the United States from other countries for nonproliferation reasons, and spent fuel from the dozens of reactors operated at the INEEL, Argonne-West, and other DOE facilities throughout the country. Under the Idaho Settlement Agreement, the Navy's spent nuclear fuel in Idaho must be some of the first fuel to go into Yucca Mountain.

Defense high-level waste is the waste that resulted from reprocessing spent nuclear fuel. At the INEEL, this high level waste is in granulated ''calcine'' form. DOE is currently deciding how this high level waste can be prepared and shipped to Yucca Mountain. In the past, DOE looked at turning this waste into glass logs in a vitrification plant as required by law, but Bechtel and DOE now hope they can make direct shipments of the calcine waste to Yucca Mountain using a standard package similar to that used for spent fuel.

The INEEL also manages the DOE National Spent Nuclear Fuel program. This program performs the analysis and technology development to support inclusion of DOE-owned spent nuclear fuel in the repository license application. As Yucca opens, this program will play a larger role for DOE and the INEEL.

Because of the history of the INEEL, located near my hometown of Idaho Falls, I have been involved in nuclear issues for many years. I visited Yucca Mountain and I have seen the dry, isolated location President Bush has recommended as the site for our Nation's permanent repository for spent nuclear fuel and high-level waste.

Right now, across the Nation spent nuclear fuel is stored in temporary facilities near cities, homes, schools, rivers, lakes, and oceans. These temporary storage facilities were never intended for long-term storage, but they have become that because our Nation has bent over backwards to do all of the science needed to ensure permanent storage of nuclear waste at Yucca Mountain can be done safely. After spending billions of dollars, our Nation's best scientists say nuclear waste can be stored safely at Yucca Mountain. No one can dispute the logic that it makes more sense for the environment, for national security, and for our Nation's energy policy to store spent nuclear fuel in one isolated location in the desert of Nevada instead of leaving it scattered across the country at over 130 temporary facilities.

Some of the opponents of Yucca Mountain say we should not support S.J. Res. 34 and development of Yucca Mountain because we cannot safely transport this material. To these opponents I say we have safely sent thousands of shipments of nuclear waste across the country for decades.

I know other speakers have already repeated this information before. But it is critical to reiterate that in this country we have seen 1.7 million miles of shipments conducted safely without a release of radioactivity. That is over 2,700 shipments. As the Senator from Alaska said earlier, in Europe where they have been doing this for two and a half decades, they have had over 70,000 tons of radioactive material safely transported. Compare that record to the risk that we would face if we do not transport it.

For those in favor of stopping the development of Yucca Mountain, the issue of terrorism has been raised. If we have over 131 sites across this country where much of this material is not stored safely—in a remote underground facility—the risk of terrorism would rise. Even the risk from a hypothetical earthquake would be much greater at the 131 sites if they were left untreated or unresolved than at one central underground location that is safe, secure, and protected.

Whether one is looking at the safety record of transportation or the risk of leaving these facilities with the stored nuclear fuel in them spread throughout the country in unsafe conditions, the conclusion must be that for our safety, for the environment, and for our national security, we must move toward one underground, safe depository.

There is also an equity issue before the Senate. For decades, energy users across this country who have received their electricity from nuclear power have paid a surcharge on their energy bill to pay the Federal Government to dispose of this waste. The Federal Government faithfully collected these fees and assumed the responsibility under law for developing a nuclear repository. Now after collecting these fees and doing the necessary science, the Federal Government has an obligation to provide for the permanent disposition of spent nuclear fuel.

Development of the repository at Yucca Mountain will greatly enhance our Nation's energy balance by demonstrating that we can dispose of nuclear waste created by nuclear power. Today, with our dependence on foreign oil for so much of our energy supply, it is critical we broaden our energy portfolio in this country. When one looks at the amount of money we pay to nations such as Iraq for oil, when we could expand our reliance on other sources of energy, including nuclear power, one has to recognize the national security implications of this vote today.

Nuclear power should play a greater role in our Nation's energy portfolio. A path forward for spent nuclear fuel will remove one bottleneck in the nuclear energy fuel cycle. Under the Nuclear Waste Policy Act, if Congress does not approve this resolution, the Yucca Mountain project cannot go forward. There will not be a nuclear repository at Yucca Mountain and nuclear waste in 39 States across this country will stay where it is.

I ask my colleagues, Are we going to vote today to leave spent nuclear fuel and nuclear waste in New York, Vermont, Illinois, Georgia, Michigan, Connecticut, Washington, Idaho, and the many other States in which it is now located or are we going to move forward with a permanent repository for spent nuclear fuel that makes sense for this Nation and the environment? I urge strongly my colleagues to vote in favor of S.J. Res. 34.

I yield the floor.

Mr. REID. Mr. President, my friend from Alaska said if something happens and one of these casks is breached, there will be an explosion. But understand, standing within 3 feet of a spent fuel rod is a lethal dose—three feet. It will kill you. It may not kill you immediately. But you are dead. It will kill you pretty quickly.

As has been brought out by my friend from Nevada, the shipments are not dangerous, relatively speaking.

I yield 2 minutes to my friend from Nevada to talk about that.

Mr. ENSIGN. Mr. President, I do want to address the map that the junior Senator from Alaska has put up over here. When he was talking to the Senator from Missouri, talking about the transportation through Missouri, he was saying these things are already happening, going through Missouri, going through her State, because that was the major reason she was voting against the Yucca Mountain proposal.

This is not the same kind of waste that is going to Yucca Mountain; otherwise, you would need a different kind of repository. This is not as high a level of nuclear waste as is coming to Nevada. So to equate the two is irresponsible, I believe. We should not even have that map on the floor.

I want to clear up two other quick things. The first is, the Senator from Idaho just said, Isn't it better to have one site? If, in fact, we had one site, and we are going to have all the nuclear waste at one site, that would be true. Except we are not going to have just one site. We are going to continue to have sites all over the United States with nuclear waste. Here is a very simple graph to understand.

Currently we have 45,000 metric tons of nuclear waste in America. By the time Yucca Mountain is supposed to start receiving waste in 2010, we will have 65,000 metric tons. When Yucca Mountain is completed in 2036, it will have 70,000 metric tons in Yucca Mountain, but because we are producing new nuclear waste every year, spread around the country still will be 47,000 metric tons, virtually the same as we have today spread out all over the country.

The Senator from Idaho has a very good argument to get the stuff out of his State. He has one of the few good arguments, but everybody else does not: If you have nuclear powerplants in your State, you will continue to have nuclear waste in your State for as long as you have nuclear powerplants operating.

It is not a question of national security. It is going to be safer to have it in one site. But we are still going to have all these other sites, so national security is focused on transportation more than it is anything else.

I thank the Senator for yielding.

Mr. REID. Mr. President, I am going to yield 10 minutes to the Presiding Officer in a second.

Another thing my friend from Alaska said is it is not going to travel through Missouri. This is one of the problems. It is like the ''immaculate reception.'' One day we will wake up and it is suddenly going to be there. I don't know, there are no transportation routes, but it will get there because the DOE says it will.

It can only go by train, truck, or barge, and for barge transportation, according to the Nuclear Regulatory Commission, the only tests that have been done are by computer. They have never stuck one of them in the water. It has all been done by computer.

I yield 10 minutes to the Senator from Delaware.

(Mr. REID assumed the chair.)

Mr. CARPER. Mr. President, I thank the deputy majority leader for yielding this time to me.

On the floor this afternoon I see three, maybe four Senators—four of whom I have been privileged to serve with in the House of Representatives, one of whom I have just been privileged to serve with for the last year and a half.

The senior Senator from Nevada knows the great affection I hold for him. He and I were elected to the House of Representatives in 1982. We came to Congress together in 1982. We began our first years in the House of Representatives many mornings working out together in the House gym. I

have had the privilege of knowing his family and watching his kids grow up. For me, and I know for many of us, this important policy decision is also a decision that is intertwined with the respect and admiration we have for our colleagues. I have great respect and admiration for both the senior and junior Senator from Nevada.

As some of you know, I spent a fair number of my years in the Navy, 5 years on active duty, another 18 years as a Reserve naval flight officer, most of that time on airplanes but other times on ships. I have been on ships that are nuclear powered. They included aircraft carriers and submarines. I have known hundreds of people who lived many years of their lives on nuclear-powered vessels. When you have that kind of background, you are maybe more comfortable with nuclear power than those who have not literally lived on a floating nuclear powerplant.

I acknowledge there are a lot of people who have legitimate concerns about the various aspects of nuclear power—a few of them have been pretty well vetted here today. One of them is transportation: how to move this nuclear waste through dozens of States and do so safely, especially in an age of terrorism.

There are concerns about the terrorists themselves and whether or not they might strike, either at a site such as Yucca Mountain or at a barge or a railroad or a highway.

Before I served in the Senate a year and a half ago, I served as Governor of Delaware. During those years, I became all the more mindful of the transportation of hazardous waste through my State and alongside my State via the Delaware River and the bay which divides the State of the Presiding Officer and my State. Every day hazardous materials make their way up and down the Delaware River. Throughout I–95/I–495, which crosses my State and the railroads of my State, the Norfolk Southern and CSX, we have dangerous materials every day traverse throughout Delaware—sometimes hazardous materials, sometimes explosive materials. We have learned to deal with them and deal with them safely. In Europe, they have shown a record over time of being able to transport nuclear waste in a way that is safe as well.

I know people who are concerned about nuclear power because of the possibility there will be an accident at a nuclear powerplant. I acknowledge those concerns are not illegitimate. The safety record of the nuclear power industry has been better in the last 10 years than probably in all the years before, and it continues to improve.

While I acknowledge, on the one hand, the legitimate concerns about nuclear power being a viable, growing part of the generation of electricity in our country, I want to talk briefly about the virtues, the advantages of nuclear power. We had a great debate on energy policy over the earlier part of this year. We talked about the growing demand, the rise in price of foreign oil, now up 50 percent. We talked about the huge and growing trade deficit we have in this country, over $300 billion last year, maybe $400 billion this year, and a significant part of that is oil imports.

I think we have begun a serious discussion and debate about what to do with respect to air emissions, how we can curtail sulfur dioxide, mercury, carbon dioxide, and nitrogen oxide from powerplants in this country and other sources.

Nuclear power, whether we like it or not, does not create sulfur dioxide emissions. It doesn't create mercury emissions. It doesn't create nitrogen oxide emissions. It doesn't create carbon dioxide emissions—it doesn't contribute to those. With respect to our environment and the quality of our air, I think nuclear power is, if anything, a friend.

I, as have a number of my colleagues, had a chance to go to Yucca Mountain. I visited the place. I talked to people who worked on that project for any number of years. I met with people in Nevada who oppose the designation of Yucca Mountain and those who favor it. I have had the opportunity along with many of my colleagues to participate in hours of hearings and other meetings with advocates and opponents of designating Yucca Mountain and licensing Yucca Mountain.

In the end it comes down to maybe two votes: one, a procedural vote as to whether or not we are going to vote to proceed to the final vote and that is one that would carry on to the licensing of Yucca Mountain. I said to my colleagues on the Energy Committee a month or so ago, I have agonized with this vote probably as much as any in my memory, trying to do, on the one hand, what I think is the right thing for my country and trying to treat my dear colleagues the way I would want to be treated. It is a tough call. It is tough for me and I know it is for many of us.

We have two votes. On the first vote, on the motion to proceed, if my vote is needed—and I am going to stand in the well there—if my vote is needed in order to be able to proceed to the final vote, I will vote yes—if my vote is needed.

On the final vote, if the motion to proceed is approved, I will vote yes on the designation of Yucca Mountain.

With that, I thank the deputy majority leader for yielding his time to me.

Mr. MURKOWSKI. Mr. President, to respond very briefly, under the agreement, there will be a rollcall vote on the motion to proceed; then the agreement is that there will be a voice vote on the final resolution.

Mr. CARPER. I appreciate that. When we vote, I will be here to vote. When the yeas and nays are asked for, my voice will say yes on that final vote.

Mr. REID. Mr. President, the Senator from Alaska, having served here as long as he has, has certainly on occasion when there has been a voice vote wanted to be listed as voting yes or no. That certainly can be stated in the RECORD. I have done it on a number of occasions myself.

Senator ENSIGN and I wish to speak longer. Senator KYL is here. It is my understanding you would like to yield some time to him.

Mr. MURKOWSKI. Mr. President, would you advise me on how much time is remaining on our side?

The PRESIDING OFFICER (Mr. CORZINE). The Senator has 50 minutes.

Mr. REID. How about here?

The PRESIDING OFFICER. Forty-five minutes remains for the Senator from Nevada.

Mr. MURKOWSKI. I yield 10 minutes to the Senator from Arizona.

The PRESIDING OFFICER. The Senator from Arizona is recognized.

Mr. KYL. Thank you, Mr. President.

Let me make a general statement, and also preliminarily comment on the debate that has been conducted by the two Senators from the State of Nevada. They have been tenacious in the representation of their position. I take no pleasure in opposing their position. They are both fine Senators and are extraordinarily good at representing the interests of their constituents in this particular case. I know it is not just a matter of representing the people who have spoken out from the State of Nevada. I have talked to Senator ENSIGN a lot, and he has argued his case with a lot of personal conviction that you don't always see in this body. I commend both of them and make the point that I take no pleasure in opposing them.

I do, however, strongly believe it is time for us to move forward with this process, and the next step in the process is the approval of this legislation. Then there are other things that have to be done, including the Department of Energy action.

I want to make a comment about this issue of the storage of nuclear waste because the Palo Verde nuclear-generating station just west of the city of Phoenix is the biggest in the country. It is a huge, successful, good nuclear-generating station. It stores an awful lot of waste. In fact, I believe, according to the Nuclear Energy Institute, more than 45,000 metric tons of high-level radioactive waste are housed at the 131 sites in 39 States—sites such as Palo Verde.

If we don't use a storage facility such as Yucca Mountain, the problem only gets worse. Each year, about 2,000 more tons of radioactive waste are being added to the total.

Senator ENSIGN made the point that even if we have a site such as Yucca Mountain, of course, we are still going to have the other storage sites around the country. That is very true. But I think it begs the question of what we are going to do with the majority of this waste.

It is a little like saying since every Wednesday morning everybody in my

area of Phoenix is going to put their garbage out, and because we keep producing garbage, we should not have a dump to where all of that garbage is taken. It is certainly true that every Wednesday everybody is going to put their garbage out. We produce more garbage, and to store it onsite is in effect storing it on the curb. That doesn't argue for the proposition that there should not be a central repository where that material is taken and disposed of in a proper way.

That is what we are talking about here. We are going to continue to produce waste. There will have to be a place to temporarily store it at each of these nuclear-generating facilities around the country. But eventually, when it cools off, it is put into these casks and transported to Yucca Mountain. That is where most of the scientists have decided is the right place to put it.

As a matter of fact, the scientific reports of the Department of Energy conclude that a repository at Yucca Mountain would protect the public health and safety in accordance with the EPA and NRC guidelines. The Nuclear Regulatory Commission is in support. The Nuclear Waste Technical Review Board is in support. The experts on the National Academy of Sciences panel who recommended the site note that there is ''worldwide scientific consensus'' for the idea.

I might also add that there is now a new element that is injected into the debate. That is the element of terrorism. We can't talk about that a lot on the floor of the Senate. I am on the Intelligence Committee. I can assure my colleagues that it is a significant issue to have this waste dispersed at a variety of sites around the country in the conditions that currently pertain. It would be much better if we were able to take a majority of it, when we could, to one site that is clearly safe from terrorism. Yucca Mountain is a remote location. It is 100 miles away from the nearest metropolitan area. It has the highest security—again, because of its general proximity to the Nevada Test Site and Nellis Air Force Range. Those are reasons we think it is important to go ahead with the next step of the process and get this material to Yucca.

With respect to transportation, we know that there have been a lot of questions raised. But the truth is we have had 45 years of experience and 3,000 successful shipments of used nuclear fuel. That is not exactly the same as this fuel, but we have much better casks now—these steel casks that have been described in detail here on the floor that will be used for the transportation of the material.

There have been no radiation releases, fatalities, or injuries, nor any environmental damage that has occurred as a result of the transportation of this radioactive cargo in the past.

I am a little distressed by the fact that people have been scared. I am very disappointed that some people—clearly not those on the floor of the Senate today—but there are some who have really attempted to scare people in individual communities with the notion that somehow there will be some great catastrophe as a result of the transportation of this material. That is so unlikely as to be something that should not be of concern to us as we move forward with this legislation.

I urge my colleagues to recognize that at some point something has to be done. We can't just allow the waste to sit where it is. There is a safe, scientifically proven location where the material can be stored. The transportation has also been throughly considered by the scientific community. A method for transporting it has been developed. Sandia Laboratories, which has done a lot of testing, assures us it would withstand the most extreme accident scenarios.

For all of these reasons, I think it is important for us to move on, get beyond this next step, and allow the DOE now to look at this Yucca Mountain site for licensing.

Again, I commend all of my colleagues for the way in which this debate has been conducted. This is an emotional issue with a lot of people around this country. But the debate has been responsible and serious and based upon good science. I commend both the proponents and the opponents for the way they have conducted this debate.

Thank you, Mr. President.

Mr. DODD. Mr. President, today, I am prepared to vote in support of S.J. Res. 34 which approves the site at Yucca Mountain for the development of a repository for spent nuclear fuel, pursuant to the Nuclear Waste Policy Act of 1982, but I do so with great caution.

The vote we cast today does not give carte blanche to move this waste. Instead, it signals a continuation of a process begun in Congress more than two decades ago. The risks are not insignificant and in the coming months and years many steps must be satisfied and many scientific tests undertaken before a license is issued by the Nuclear Regulator Commission and a single shipment of waste is moved. In addition, there must be open dialogue among industry, organizations, transportation experts, and government entities at the Federal, State, and local level to determine a safe and workable transportation system. If the ongoing scientific, environmental, or public safety tests are not satisfactory, or a transportation system is deemed unworkable, then the site should not be licensed.

For Congress to stop the process today with no viable, permanent alternative solution on the table is shortsighted and wrong. I recognize the limitations on the amount of waste that Yucca Mountain can accept and the length of time it will take to transport the waste. I further understand that some waste will necessarily remain on site at individual facilities even if Yucca Mountain is licensed, as nuclear reactors continue to operate and generate waste.

But to keep all of the current and future waste on-site at approximately 100 sites in above ground storage is not a prudent long-term solution. In fact, many facilities will be reaching their storage capacity long before their licenses expire. For these reasons, while we continue to move forward with Yucca Mountain, we must also step up our security at all the nuclear facilities sites around the country. If all systems are a go with Yucca, it will be at least 10 years before any waste is moved.

My record is clear. I have supported nuclear power and the obligation of the Federal Government to take responsibility for nuclear waste. I am one of a handful of current Senators who was here in 1982 to vote on the National Nuclear Waste Policy Act of 1982. I supported that initiative and again in 1987, I supported amendments to the 1982 act which singled out Yucca Mountain to be examined as a nuclear waste repository. However, I have voted against both the idea of interim, above ground consolidated storage and moving forward with the process before the Secretary of Energy formally recommended Yucca Mountain.

No one knows the costs and benefits of nuclear energy more than the residents of my State. Connecticut has two operating nuclear facilities and two permanently shut down facilities that are undergoing decommissioning. Nuclear energy provides more than 45 percent of the electricity generated in Connecticut. Only Vermont, New Hampshire, New Jersey, Illinois and South Carolina have a larger percentage of electricity generated by nuclear power.

It is a fact that while I have supported nuclear power, I have also been one of its most vocal critics when I believed the industry and oversight agencies failed to exercise appropriate controls over the facilities in my State.

I have also been a champion of the need for alternative energy sources, including renewables, to meet our growing energy needs and offset our dependance on energy sources that generate waste, pollute our environment and cause public health concerns. I applaud people, including many of my colleagues, who champion these issues, drive fuel efficient and cleaner burning automobiles, and make personal choices to use alternative energy sources in their daily lives.

We will be judged by future generations not only by the decisions we make in the coming months and years regarding nuclear waste, but also by the bold choices we make regarding our future energy security and the health and welfare of our planet.

This is not a perfect solution, but a reasonable step if the risks can be managed. I hope that it will be looked upon as such in years to come.

Having said that, while I support the substance of this resolution, I voted against the motion to proceed. As chairman of the Rules Committee, I take the rules of the Senate very seriously. It is my belief that despite what may have been written into the Nuclear Waste Policy Act of 1982 and 1987, I believe it is the fundamental prerogative of the Majority Leader to set the agenda of the Senate. My understanding is that at no time in the recent history of the Senate has that prerogative been violated. Moreover, I fail to see why my colleagues felt the need to violate that prerogative today. There are still more than 2 weeks to bring this matter to the floor under established practices of the Senate. Furthermore, it is worth noting that this matter was brought up by the minority during the middle of a very important debate to address wrongdoings and shortcomings in the accounting industry and corporate sector. I want to make this very clear, my vote against the motion to proceed was not against S.J. Resolution 34, but out of respect for the practices and prerogatives of the Senate. If there had been a recorded vote on S.J. Res. 34, I would have voted aye.

Mr. VOINOVICH. Mr. President, I rise today in support of establishing a permanent nuclear repository at Nevada's Yucca Mountain. Establishing a single site for high-level nuclear waste is the best thing we can do to meet our growing energy needs in an environmentally sound manner, support our domestic economy, and protect our national security.

One of my goals in coming to the Senate was to enact a comprehensive U.S. energy policy that harmonizes our energy and environmental needs. I worked hard with my colleagues on the Energy bill and after 6 weeks of debate, this body finally passed legislation that does just that. Our challenge in the energy bill was to encourage development of domestic energy sources in a balanced way that respects seemingly competing needs, the economy and the environment. These are not competing needs, however. A sustainable environment is critical to a strong economy, and a sustainable economy is critical to providing the funding necessary to improve our environment.

In order to maintain a strong economy, we will have to produce more energy to keep up with the growing demand. According to the Department of Energy, we need to increase by 30 percent the amount of energy we produce in the United States by 2015 in order to meet our county's demand. To ensure that consumers have access to low-cost, reliable energy, we must make use of every available resource instead of putting all of our eggs in one basket. We need to increase our production of oil, gas, coal, nuclear energy, and renewables. Keep in mind that only two-tenths of 1 percent of our total electricity comes from wind and solar power. At the same time, we need to continue to increase conservation efforts which have already substantially contributed to reducing our reliance on imports. We simply must diversify the source of our energy supply and we can do so while protecting our precious natural resources.

One of our great untapped resources is nuclear energy. It is an important part of meeting our Nation's energy needs and harmonizing our energy and environmental policies. Over the past 40 years, we have seen how safe and reliable nuclear energy can be. We use it today. Nationally, we obtain 20 percent of our electricity from nuclear energy plants and in my State of Ohio, nuclear power provides 12 percent of our total.

But this level is far below what other countries do. For example, France derives 70 percent of its electricity from nuclear power; Sweden uses 39 percent; South Korea 41 percent; and Japan uses 34 percent.

One of the reasons these countries use so much nuclear energy is that it produces zero harmful air emissions. None. I am not sure that many people realize this. Throughout my career, I have been actively involved in the debate concerning how to reduce emissions from power plants and continue to provide safe and reliable electricity to consumers. This has been difficult, however, because so many so-called environmentalists raise issue with all of our energy alternatives.

For example, here's what they say: coal, which supplies 52 percent of our energy, is too dirty. Hydropower, which supplies 7.3 percent of our total energy, is criticized because the dams can disrupt the ecosystem. Due to lengthy and complicated environmental regulations, it is nearly impossible to build new pipelines for natural gas, which supplies 16 percent of our energy. Even windmills, the source so many of my colleagues point to, has siting difficulties due to their noise and unsightly appearance. Nuclear power, which supplies 20 percent, has been demonized because of the waste issue, which can be solved.

The science for using nuclear energy has been rapidly developing over the past several decades and nuclear energy offers one of the best alternatives for the future: a clean-burning and reliable source of energy.

Since 1973, the use of nuclear energy has prevented 62 million tons of sulfur dioxide and 32 million tons of nitrogen oxide from being released into the atmosphere. Nuclear energy also releases none of the so-called greenhouse gas emissions, such as carbon dioxide. In fact, according to the Energy Information Administration, nuclear power has offset more than 3.1 billion metric tons of carbon emissions between 1960 and 2000 that would have been generated by fossil fuels.

Nuclear energy has incredible potential as an efficient and clean source of energy, yet we face some major impediments that prevent us from taking full advantage of its benefits. During consideration of the energy bill, I offered two amendments to address these problems and promote the growth of nuclear energy. Both amendments were included in the Senate version of the energy bill, and I hope the conferees will keep them in the final version.

The first amendment reauthorizes the Price-Anderson program, which provides liability protection to the public paid by the industry. The second amendment provides needed Nuclear Regulatory Commission reforms to address the human capital crisis that is impacting the NRC, improves licensing and decommissioning oversight, and strengthens anti-trust protections by moving the review process from the NRC to the Justice Department.

But the biggest impediment to the growth of nuclear energy could not be addressed in the energy bill and that is what brings us here today. Congress recognized the importance and necessity of having one storage site for spent nuclear fuel in 1982 with the passage of the Nuclear Waste Policy Act, which was signed into law. That law required the Department of Energy to locate, build, and operate a deep, mined geologic repository for high-level nuclear waste.

In response to this law, the Energy Department identified, studied, and selected viable potential sites for this purpose. In 1987, Congress then amended the law and designated Nevada's Yucca Mountain as the only site that could be considered and stipulated the further study was required to determine whether that site was suitable.

Congress stipulated that the nuclear waste storage facility was to be completed by January 31, 1998. Obviously, this deadline has not been met because the Energy Department wanted to be thorough and base their decision on science. Some of my colleagues would have you believe that this was a rash decision. On the contrary, Secretary Abraham recommended Yucca Mountain after two decades and $7 billion of scientific research.

In addition, President Bush affirmed this recommendation. The House of Representatives affirmed this recommendation overwhelmingly by a vote of 306 to 117 in May. The Senate Committee on Energy and Natural Resources affirmed this recommendation by a vote of 13 to 10 in June. Now it is the Senate's turn.

All of this support is based on science. This is exactly what we want to see in the formation of public policy; science driving the policy.

Yucca Mountain is located approximately 90 miles from Las Vegas in an area that averages about seven inches of rainfall a year. The Energy Department does not expect water to come into contact with any of the nuclear material that will be stored there for more than 10,000 years. Surrounded by unsaturated rock layers, nuclear waste would be stored approximately 1,000 feet above any water, which is still about 1,000 feet below ground.

Even if water somehow infiltrated Yucca Mountain and corroded the seal and then penetrated the robust fuel containers before 10,000 years passed, natural and engineered barriers would prevent or limit any release of radiation. Furthermore, Yucca Mountain is located in a hydrologic basin, in which water does not connect to any rivers, oceans, or the groundwater system that serves Las Vegas. Through years of scientific research, it has been determined that the site is secure and that radiation exposure to the public would be well below both the stringent EPA limits and natural background radiation levels.

Let me emphasize: The resolution we are considering allows the Yucca Mountain program to continue to the next step; it is not the end of the process. The site must still go through a rigorous licensing review, which is expected to last up to five years. Moreover, the NRC still must address a whole host of issues including monitoring and testing programs, quality assurance, personnel training, and certification, emergency planning, and more.

Additionally, the NRC must use standards adopted by the EPA specifically and exclusively for Yucca Mountain. These strict standards provide that an engineered barrier system should be designed to work in combination with natural barriers so that, for 10,000 years following disposal, the expected radiation dose to an individual would not exceed 15 millirems total effective dose equivalent per year, and 4 millirems per year for groundwater exposure.

These are exceedingly stringent standards designed to protect the public from any harmful exposure, now or in the future. To illustrate what the numbers mean, let me offer two examples. In Denver, Colorado, due to the higher altitude and cosmic radiation from the sun and stars, residents are subject to at least 15 millirems of radiation more per year than people who live in my hometown of Cleveland. On average, Americans are exposed to 4 millirems of radiation per year through the naturally occurring radioactive potassium in the 140 pounds of potatoes that an individual eats on average each year.

This rigorous licensing process combined with the full completion of the site is expected to take 10 years. Therefore, unlike most of the attention this matter has received in the media, our action in the Senate will not begin the transportation of nuclear waste to the repository. Instead, this resolution simply affirms the science behind the project and allows the experts to continue to move ahead with their analyses and reviews.

While some people have concerns about the transportation of nuclear waste, many people may not realize that nuclear waste has been shipped across our country since 1964 and that it has an amazing track record of safety. During this period, more than 3,000 shipments have traveled 1.7 million miles on roads and railways with only eight minor accidents: no injuries, fatalities, or release of any radiation.

There are two reasons for this success. First, the containers for the waste have been tested rigorously under extreme conditions, including being dropped from buildings, hit by trains, and burned at high temperatures. Second, there are numerous safety measures that federal agencies and state and local governments have developed, including satellite positioning, designation of special routes, police escorts, inspections, and emergency response planning.

Over the next 10 years as new scientific discoveries are made, it is likely that new regulations, procedures, and technology will offer further improvements to the safety and security of transporting spent nuclear fuel to Yucca Mountain. And the NRC in conjunction with other federal agencies will continue to examine the safest and most effective means of transport and storage.

Failure to approve this resolution will have serious costs to our economy and national security. Our nation has already spent $7 billion over 20 years researching this specific site. The greater cost is the current danger we face across our nation with 131 facilities in 39 states storing more than 40,000 tons of spent nuclear material. To put these numbers in perspective, about 160 million Americans live within 75 miles of these sites.

Establishment of a repository at Yucca Mountain would allow all of the nuclear waste to be stored in one place, underground in a remote location. The site is on federal property with restricted access to the land and airspace, and as a further safeguard, the Nellis Air Force Range is nearby. From a national security perspective, one site is easier to defend then many facilities scattered throughout the nation.

The current situation is also costly in terms of capacity. The facilities which currently store this spent fuel are only designed to be used on an interim basis and space is limited. The Energy Department estimates that replacement facilities at each interim site would have to be built every 100 years with major repairs every half century.

Nuclear power is a necessary and sound part of our energy future that makes sense for our environment and our economy. Furthermore, because it protects national security and the safety of all Americans, I urge my colleagues to listen to the science and support this resolution to affirm the President's recommendation to establish a permanent nuclear repository at Yucca Mountain.

Mr. ALLARD. In 1982, Congress passed the Nuclear Waste Policy Act. In 1987, after being ranked as the site that possessed the best technical and scientific characteristics to serve as a repository, the Nuclear Waste Policy Act was amended to direct the Department of Energy to study Yucca Mountain as a potential storage site.

The Federal Government has spent over 20 years and $8 billion analyzing and studying potential sites for disposal of nuclear waste. This serious investment of money and human capital has led to the clear conclusion that Yucca Mountain is indeed scientifically and technically suitable for development.

As a result of this massive effort, on February 14, 2002, Secretary of Energy Spencer Abraham formally recommended to President Bush that the Yucca Mountain site in Nevada be developed as the Nation's first long-term geologic repository for high-level radioactive waste. I fully support this designation, and I will vote to move forward with the process, allowing the bipartisan regulatory experts at the Nuclear Regulatory Commission to make a final determination of whether to allow storage at the site.

Colorado, and indeed the Nation, has much to gain from the opening of Yucca Mountain. Material that is currently scattered throughout the United States will finally find a safe long-term shelter at Yucca Mountain—isolated in the remote Nevada desert.

Those opposed to opening Yucca continue to argue about the method of delivery to Yucca Mountain. Much has already been said in this respect, but I would like to point out that in the last 40 years, more than 3,000 shipments of spent nuclear fuel have traveled 1.6 million miles in the United States with no radiation related injuries or deaths. The Nuclear Regulatory Commission has performed numerous safety tests on the multi-layered containers that carry the nuclear substance. These tests, often exceeding regulatory requirements, have never yielded any negative or potentially harmful results. Additionally, nuclear waste is a solid that is not flammable and cannot explode. The casks have surpassed expectations during rigid drop tests, puncture tests, heat exposure trials and submergence drills.

Public safety has always been a priority, but has become even more important in this unprecedented time of threat to our national security. I believe that the centralization of our used nuclear waste 1,000 feet beneath the earth's surface in a single, highly secure location is preferable to the current scattered distribution of nuclear waste in 131 temporary surface facilities in 39 States.

Without Yucca Mountain, the fuel at the Fort St. Vrain facility will remain there indefinitely. This means that the 2.6 million people in Colorado that live within 75 miles of a nuclear facility will continue to live in close proximity; our citizens will be forced to wait another 20 years and spend 8 billion more taxpayer dollars to find another suitable site. Without Yucca

Mountain, major metropolitan areas in my State will still have only 20 miles between their town limits and a nuclear facility that stores fuel above ground. Without Yucca Mountain, waste being stored at facilities that are safely designed to hold waste for 50 to 100 years will have to wait untold years for a new destination, costing billions of dollars. Without a favorable decision on Yucca Mountain, a facility that is designed to store nuclear material safely for 10,000 years will shut down.

It is important to note that this vote does not mean that Yucca Mountain will open tomorrow. What it does mean, is that the next phase of science can begin in earnest—highly skilled nuclear experts will determine whether the facility merits a license to begin accepting the material. After that, any shipping is subject to strict Nuclear Regulatory Commission and U.S. Department of Transportation guidelines and regulations, and would not begin, if Yucca is finally approved, until 2010.

I support the Yucca Mountain Project, and will continue to be an active participant in the debate. I encourage my fellow colleagues to support the project, and fulfill the requirements of the law imposed by Congress some 20 years ago.

Mr. DOMENICI. Mr. President, I am pleased that the Senate is preparing to vote on the resolution that would allow continued evaluation of Yucca Mountain's suitability for a high-level nuclear waste repository. I compliment Senator BINGAMAN on his resolution and on his success in reporting that resolution out of the Energy and Natural Resources Committee.

Members don't need to be reminded of the vital role that nuclear energy plays in our national security. There is no question that it directly impacts our environmental security and our energy security. Without nuclear energy, we would have far dirtier skies and be far more dependent on foreign energy supplies.

I have argued repeatedly that our nation must maintain nuclear energy as a viable energy source far into the future. With advanced technologies, it can become a fuel for centuries into the future. Its clean reliable baseload power will be essential in powering our economic growth for future generations, just as it is a vital component of today's economic successes.

For nuclear energy to continue to support our economy, we must address the waste issue. There is no denying that these wastes represent an area of risk but every energy source requires a balance of benefits and risks. The risks associated with nuclear waste are ones that we can fully control.

I am well aware that hundreds of outstanding issues have been identified by the Nuclear Regulatory Commission. And the Department is well aware that they must address each and every one of the NRC issues before the Commission is going to move towards a final license.

In many meetings with the NRC chairman, as well as many of the commissioners, I have always been impressed with their intent to deal with this, or any licensing issue, through careful study of the relevant scientific facts. The NRC has the expertise to evaluate these outstanding issues, and I am confident that they will do so with great care.

It is not up to the U.S. Senate to decide on the complex scientific issues that will eventually determine the fate of a license for Yucca Mountain. Our vote today is solely on the question of whether the licensing process continues.

I have been very sorry to see the overblown concerns on transportation by those who wish to block further evaluation of Yucca Mountain. Apparently the opponents of Yucca Mountain are so intent on winning this battle that they are willing to use transportation issues to frighten the American people into abandoning nuclear energy. That would be a colossal mistake for our nation and would seriously undermine national security.

The simple fact is that transportation of nuclear materials is a challenging and risky operation, but it is also an operation that has been extensively studied and engineered for success. In the United States, as well as in other countries, the record for transporting spent fuel is superb. Opponents need to remember that the shipping casks for spent fuel are designed to withstand the most rigorous conditions, and routes will be carefully chosen to further limit risks.

In the United States, since 1960, we have shipped spent fuel about 2700 times and it's traveled over 1.6 million miles. Sure, there have been a few accidents. But no radiation has ever been released in any of them.

The record at the Waste Isolation Pilot Project is also spectacular. In their 3 years of operations, they have logged about 700 shipments traveling over 1.5 million miles. And in Europe, over 70,000 metric tons of spent fuel have been shipped, an amount roughly equal to the total authorized limit for Yucca Mountain.

Furthermore, in any debate about transportation, the simple fact is that route selection and detailed planning will begin at least 5 years before the first shipment and that the total number of shipments in a year will be around 175, a far cry from the 300 million annual shipments of hazardous materials that are currently moving around the country. There will be plenty of time to debate and optimize shipping plans before any spent fuel moves.

In responding to the outstanding issues raised by the NRC, I'm sure the Department will continue to analyze the mountain and improve their modeling and simulation. That is certainly important research that I fully support. But I want to note that other research is also vital.

I have spoken on many occasions with my concern that the Nation's policy of simply treating spent fuel as ''waste'' deserves careful debate. Spent fuel has immense residual energy content. I am not convinced that we should be making a decision today that future generations will have no interest in this superb energy source.

I have noted that alternative spent fuel management strategies should be carefully studied and evaluated. Reprocessing and transmutation could not only recover residual energy, but could also vastly reduce the toxicity of the final waste products.

I am pleased that the Department plans for all spent fuel in Yucca Mountain to be fully retrievable for at least 50 years. We may find that these new approaches can even be applied to the spent fuel in Yucca Mountain and they certainly will influence any additional repositories that we may need.

In my view, the Nation is far better served by beginning to move spent fuel into a single well-secured repository than to leave it stored in temporary facilities at 131 sites in 39 States. I support the joint resolution to override the veto of the Governor of Nevada and continue evaluation of Yucca Mountain as our Nation's future repository.

Mr. HATCH. Mr. President, I rise today to speak regarding the proposed national nuclear waste repository at Yucca Mountain, NV. After serious consideration of this issue over the last several years and after carefully studying the track record of the nuclear industry in the United States, I have concluded that I will not stand in the way of sending this waste to a permanent repository at Yucca Mountain. I also understand the reservations expressed by many of my colleagues in this Chamber, and I have certainly taken such considerations into account in making my decision.

Utahns have a right to be skeptical about government promises with regard to the handling of nuclear materials. In Utah, we have had more than our share of victims from government activities relating to atomic testing and the uranium industry. I have met with too many Utahns who are suffering needlessly. These Utahns were my inspiration when I passed the Radiation Exposure Compensation Act through Congress and when I improved this legislation a few years ago. Over the years, the act has provided compensation to thousands of downwinder victims.

One of the top considerations in my decision on this issue has been the future of a proposal for a temporary storage site on the Skull Valley Goshute Indian reservation in Utah. Skull Valley has been targeted by a private consortium of nuclear electric generators as a temporary site for nuclear waste en route to Yucca Mountain, NV. I have concluded that if the plan to send high level nuclear waste to Yucca Mountain is not approved, Skull Valley will likely become the targeted alternative for permanent storage even though it is a private project only

being considered as a temporary facility.

I have many concerns regarding the proposed Skull Valley site. Chief among these is that it would pose a serious threat to the nearby Utah Test and Training Range, which is one of the most important bombing ranges available to our military. The dangers involving live ordnance or aviation accidents in the vicinity of the proposed above-ground nuclear storage casks present an unacceptable risk. Secretary Abraham of the Department of Energy has made it clear to me that the Department will not reimburse the nuclear industry for storing nuclear waste at Skull Valley. By not funding the Skull Valley site, the Department of Energy provides a significant incentive for generators of high level nuclear waste to find solutions to storage problems either on-site or to send materials directly to the permanent site proposed at Yucca Mountain.

Also a top concern for me and many Utahns has been the issue of the safe and secure transportation of these materials through Utah as they travel to Yucca Mountain, NV. As you may be aware, well over 80 percent of the high level nuclear waste proposed to be stored in Yucca Mountain is projected to travel through populated areas of Utah.

Only after receiving a firm commitment from Secretary Abraham that the Department of Energy will work with the State of Utah to formulate an enhanced and updated transportation plan do I feel confident in casting this vote today. The plan will address operational procedures, additional emergency first responder training, and coordination efforts between State governments and the Department of Energy regarding the safe transit of nuclear materials to Yucca Mountain. I would like to make it clear that the Utah congressional delegation will closely monitor the development of this updated transportation plan.

In closing, I want to underscore how difficult this decision has been for me. I could never support any policy that would place Utahns at risk, and I believe that my decision to support the Yucca Mountain project is consistent with that. This decision has come down to my commitment to fight against the ill-advised and under-equipped facility proposed for Skull Valley, UT, and a firm commitment from the Department of Energy concerning the safe and secure transportation of these materials. With these strong commitments from Secretary Abraham, I have decided that I should not stand in the way of sending this waste to its permanent resting place in Yucca Mountain.

Mr. CAMPBELL. Mr. President, I rise today to speak on designating Yucca Mountain as the Nation's waste repository in the State of Nevada.

But before I start, I would like to get a few things clear. First, I don't oppose nuclear power. Nuclear power is an efficient and clean way to generate electricity. The obvious downside to nuclear power is that its waste is harmful to people. Yet, several States benefit from the relative clean power that nuclear plants generate. Clean air, clean water, and efficient power are significant benefits that some enjoy.

My opposition to designating Yucca Mountain is deeply rooted in my strongly held belief in States' rights. I believe that States should determine their own destiny—when States elect or choose to benefit from a program or policy, then those States should correspondingly assume the costs, costs that might not only be monetary.

My State of Colorado did not choose to build nuclear power plants. My State of Colorado did not choose to enjoy the benefits that nuclear power offers. Correspondingly, my State of Colorado never chose to assume the responsibility of storing nuclear waste and, therefore, we do not.

Some States favor storing nuclear waste and enjoy the economic benefits of doing so. My neighbor to the south, New Mexico, for example, chose to store nuclear waste in Carlsbad. The WIPP facility there is a major source of revenue for the community and the State. Although it has some detractors, I think that it is widely regarded as a big plus. The State of Nevada, however, unequivocally opposes storing waste at Yucca Mountain. It objects for a variety of reasons. Whereas the State of New Mexico considers storing nuclear waste good for business, the State of Nevada believes that storing nuclear waste at Yucca will kill business. Nevada's economy relies, perhaps more than any other State in the Nation, on tourism.

I cannot, in good conscience, vote to override a Governor's veto, when the long-term effect has the potential to destroy that State's economy. During hearings before the Committee on Energy and Natural Resources on designating Yucca, I noted my moral opposition. Today, I reiterate that argument.

I likened the issue to a homeowner who builds his big house on a small lot, and then realizes that he failed to build a septic tank for the house. Rather than change his design, the homeowner just puts the septic tank on his neighbor's property. I don't want someone else's septic tank on my property. The State of Colorado doesn't want a septic tank. We shouldn't force Nevada to be a septic tank for other States.

Furthermore, I am concerned about the routing of nuclear waste shipments going through Colorado toward Yucca. I realize that the routes that have been referred to are not certainties, but they are certain possibilities. After this vote, the Congress will have a very limited voice in choosing routes. I share many of the same transportation concerns some of my colleagues have expressed. I don't want to restate all of their points. Rather, I just want to note that if Yucca mountain moves forward, Colorado will likely be a major transit route for nuclear waste with nearly 13,000 rail shipments over 38 years, one of the highest in the Nation.

And what is not transported by rail will be transported by truck in I–70 and through Vail Pass, a difficult mountain road winding through Colorado's Rocky Mountains. Trucks wreck all the time on I–70. I am happy to know that we have not had any major nuclear waste accidents by truck, but am troubled by the possibility, just the same.

A colleague made a logical argument about the benefits and risk. For him, the benefits of designating Yucca mountain make the risks tolerable. I am unable to make the determination. Because I don't know what the transportation routes will be and my Governor does not have authority to designate or oppose routes, I can't engage in a cost-benefit analysis.

In the absence of state oversight authority to regulate, and without sufficient information on route designations, the risks are too great for this Senator to approve Yucca Mountain.

Mr. KERRY. Mr. President, I represent a State with one active nuclear reactor powerplant and a second decommissioned nuclear power plant, both of which are storing nuclear waste far beyond their initial design limits. I can assure you there is much concern within my State over what the government plans to do with nuclear waste and a sense of urgency to get something done. I cannot in good conscious however vote to make Yucca Mountain the destination for all of our nuclear waste when a number of studies urge caution and further study to make sure that we are not making a mistake, a mistake that could plague the people of Nevada and potentially more than 40 other States in which we will transport this nuclear waste in the years to come.

In the late-1970s President Carter, himself a nuclear engineer, initiated an Interagency Review Group, IRG, to solve once and for all the high-level nuclear waste problem in the United States. The IRG tasked the Department of Energy with finding the best sites in the country for storing our nuclear waste. At the same time, the Environmental Protection Agency, EPA, and the Nuclear Regulatory Commission, NRC, were tasked with developing criteria for the selection of sites. Then, in 1982, Congress enacted the Nuclear Waste Policy Act, NWPA, which included a commitment to identifying two sites. Between 1982 and today, however, the process was changed. In 1987, Congress amended the NWPA by directing DOE to develop only one site, Yucca Mountain. Yucca Mountain was selected as the only site for purely political reasons.

Over the years, the EPA has lowered standards when they discovered that Yucca Mountain could not meet the existing ones. They abandoned a collective radiation dose limit when it was discovered that the Yucca site could not meet it, and, just last year, the

EPA promulgated final standards for licensing Yucca Mountain that rely on dilution of nuclear waste as opposed to containment. In other words, we changed the standards so that we did not have to change the site. Yucca Mountain was picked, in part, because it is an arid, unpopulated area already owned by the federal government, which used it as a nuclear test site from the 1950s to the early 1990s. The original theory was that, if canisters deteriorated, there would be little water in the dry ground to carry the radioactive waste to other areas. But that theory has already been thrown as Chlorine-36, a radioactive isotope created during nuclear weapons tests over the Pacific Ocean in the 1950s, was recently discovered 1,000 feet below ground at Yucca Mountain. In just 50 years, that material traveled in the atmosphere to Nevada, was delivered as rain at Yucca Mountain and traveled at least 1,000 feet below the surface—the level where the nuclear waste would be stored. Such rapid movement was completely unexpected and required a revision of models of water flow in the area.

Because of this Chlorine-36, the DOE plans to bury the waste in canisters made of Alloy 22—a new composite metal containing nickel, chromium and molybdenum—and then lined on the inside with stainless steel. Alloy 22 is resistant to corrosion from water, but it is a manmade substance that has existed for only about 20 years. The DOE has only about 2 years of data on the effects of corrosion on it. Using such limited data, the government is predicting the life expectancy of the canisters 10,000 years into the future. No other nation is planning to use Alloy 22 to bury its nuclear waste, and the material does not exist in nature, so there is no way of naturally predicting how strong it will prove to be. Clearly, further study is needed before reliable predictions can be made.

I am concerned that President Bush approved Yucca Mountain despite the fact that the General Accounting Office back in December of last year, identified more than 200 important scientific and technical questions about Yucca Mountain that remain to be answered. This is especially troubling because Presidential candidate Bush promised back in 2000 that ''sound science, not politics, must prevail'' in determining whether to bury nuclear waste at Yucca Mountain. The GAO report urged the administration to postpone a decision until these questions could be answered. I am disappointed that the administration has failed to listen to the GAO.

There are transportation issues as well. I am not entirely convinced that we have a well-thought-out plan for moving all of this nuclear waste from around the country. The safety record of nuclear waste transportation should give us pause. Between 1964 and 1997, the DOE made approximately 2,913 shipments of used nuclear fuel. During this time, there were 47 safety incidents involving nuclear shipments, including six accidents. Much is left to be decided on transportation and I for one am reluctant to proceed until we have answers as to how this material will be shipped, on what routes, by what means and near what major cities. None of these questions have been answered, and I believe we should know if we can move this radioactive waste safely before we designate a national repository.

The routes for transporting nuclear waste to Yucca Mountain have not been finalized by DOE. The DOE is currently considering three modes of transportation, rail, truck and barge, but the DOE has not finalized the modes nor the routes. In the Final Environmental Impact Statement, EIS, for the Yucca Mountain project, DOE proposed a set of truck, barge and rail routes. These routes make use of major highways and pass through several of the Nation's largest metropolitan areas. The EIS for Massachusetts shows that if trucks are used to move the waste, 456 truck trips would originate in the Bay State and another 1,469 trips would transit the state en route to Yucca Mountain. Under the rail scenario, the EIS showed that 39 rail trips would originate in Massachusetts and another 511 would pass through the state en route to Yucca. In addition, the NRC is responsible for testing the containers that the waste will be shipped in. Thus far, all of the NRC tests relied exclusively on computer simulation to test the storage containers against fire and water damage. I think we can all agree that more testing is needed with actual storage containers to ensure the safety of all Americans.

Because of this lack of testing and with real concern for their cities, the Conference of Mayors recently passed a resolution calling on the Federal Government to oppose the Yucca Mountain repository until the serious safety concerns in the transport of nuclear waste were answered. Some of these concerns include the lack of physical testing of the transport casks and the lack of money and knowledge in our cities needed to deal with an accident involving nuclear waste. I believe we would be wise to listen to our mayors.

None of us here today want this waste to stay onsite forever, but we need a safe and responsible solution for disposal of the waste we have created. And we urgently need to develop a policy that protects the health and safety of local communities and all Americans. There are too many unanswered questions about the long-term effects of storing the waste at Yucca Mountain and the means by which we transport that waste there, and that is why I am voting no today.

Mr. LIEBERMAN. Mr. President, I vote today against the motion to proceed to the consideration of the Yucca Mountain resolution. I have cast this vote for several reasons. First, on procedural grounds, I agree with the majority leader that to consider the issue now would be an unacceptable divergence from Senate practice and procedure. It is the right of the majority leader to schedule the consideration of legislation on the floor of the Senate, and for me to vote for this motion would be to sanction what I view as an inappropriate procedure.

But the biggest problem is the substance of this plan. I don't believe that the Yucca Mountain site is ready to be approved by the Congress. There is an old saying: ''underpromise, overperform.'' Unfortunately, the Yucca Mountain nuclear waste storage plan overpromises and underperforms for the people of my State. I have studied this issue carefully, mindful of how important nuclear power is to Connecticut, and of how concerned Connecticut families are about the health and safety effects of storing nuclear waste on site. They are right to be concerned. But after many months of deliberation, I have decided that the plans aren't ready. Voting to create a waste repository at Yucca Mountain today would solve no problems and create a few new ones for the people of my state. It is not wise policy.

I believe the most obvious indication of this fact is the Department of Energy's plans to apply for a license from the Nuclear Regulatory Commission. Even though the Nuclear Waste Policy Act instructs the Energy Department to submit an application to the Nuclear Regulatory Commission 90 days after Congress acts, Secretary Abraham has stated that his agency will not submit an application until December 2004 at the earliest. Obviously, the Energy Department is not ready to make their case for this site. Why should we be endorsing the project long before the Department is ready?

From studying the plans for the site, I believe that the reason that the Energy Department is not ready to submit its application is because, simply, too many unanswered questions remain. In dealing with nuclear waste, we should first do no harm.

It is too soon to say conclusively that the Yucca Mountain plans meet that standard. Consider the storage problems. In a December 2001 report to members of Congress, the General Accounting Office wrote of ''uncertainties'' relating to the ''longevity of [engineered] waste containers,'' and noted that ''significant work is needed'' before the safety of the containers can be substantiated. The GAO also felt that more studies needed to be completed before the physical characteristics of the site could be declared suitable for the project. Most notably, the report stated the GAO's uncertainty on ''how the combination of heat, water, and chemical processes caused by the presence of nuclear waste . . . would affect the flow of water through the repository.'' Among the remaining physical ''uncertainties,'' the GAO prominently listed: faulting and fracturing of the

repository rock; the flow of water through the repository rock; and the stability of the repository rock under heated conditions and conditions involving seismic events as main concerns.

The GAO's view of uncertainties was seconded by the Nuclear Waste Technical Review Board—an independent review board that acts as a check for the Energy Department's view of the science. In a January 24, 2002 letter to Congress, the Review Board offered criticisms of the DOE study, finding that, ''as a whole . . . the technical basis for the DOE's repository performance estimates is weak to moderate.''

But, the most important point for my home state of Connecticut is that, even if Yucca Mountain worked perfectly, with none of the potential problems that many experts have raised, it would not answer our problem of nuclear waste storage. It gives the people of my State the false hope of a solution to this serious problem. In fact, the plan may well create new problems in many areas of the state that are now free of nuclear waste problems.

It is not as if, if we were to approve this site, the tons of nuclear waste in Connecticut would be instantly transported to Nevada. Rather, it would take 40 years and thousands of shipments to transport that waste across the country, and by the time Yucca was filled, we would have generated just as much waste at each of Connecticut's nuclear sites. So the opening of Yucca Mountain will not free us of the terrorist threat at each of the sites. To the contrary, it will disperse the waste even more than it is currently dispersed.

And the most dangerous waste of all—the ''hot'' waste that has just been removed from the reactors—cannot be moved off of our sites in Connecticut until it has cooled for at least 5 years. Thus, as long as we are operating nuclear plants in Connecticut, we will have dangerous nuclear waste at those plants. In other words, the current Yucca storage plans do not resolve Connecticut storage issues.

Finally, I am concerned that the transportation of the waste would bring new problems to regions of Connecticut that do not face them. The Energy Department has formulated no logical and systematic plan regarding the transportation of waste. To transport the approximately 40,000 tons of nuclear waste to Yucca Mountain, over 100,000 truck shipments or 36,000 combined rail and truck shipments would be needed, to be spread over the next 40 or so years. This would include waste from other States coming across on Connecticut highways and railroads. The attacks on September 11 have created major new questions about the transport of this waste, which could have a major effect on my State and which have not been addressed. Until some safe and proven plan to transport this waste is offered, I am troubled by the danger on our roads and rails.

We need to deal with this nuclear waste—but no one has demonstrated yet that Yucca Mountain is the answer. With technology advancing every day, perhaps it will be the answer tomorrow. Or perhaps in the future we will find another, much better solution. Until then, the imperfect status quo is better than a highly uncertain and incomplete plan such as this one.

This proposal is simply not yet ready for our consideration. Unfortunately, the Energy Department has stated that it will not continue to consider the site if this vote does not go its way. I think that is the wrong approach—the questions I have raised today may be able to be answered satisfactorily with more planning and better technology, and if they are, I would probably support the site. But this proposal is not ready for prime-time, and I am concerned that it will not be responsible to proceed to its consideration at this point.

Mr. JEFFORDS. Mr. President, we are voting today on whether to move forward on development of Yucca Mountain as a permanent disposal site for our Nation's nuclear waste.

Nuclear power provides an emissions free energy source. My State of Vermont, along with 39 other States, relies on nuclear power for a large portion of its electricity generation. It is an important part of our energy mix.

Nonetheless, we must be realistic in dealing with the downsides associated with nuclear power. Over 30 years ago, as Vermont's Attorney General, I was concerned about the impact of nuclear waste on our environment and the health of Vermonters. As Attorney General, I fought to improve the safety standards at Vermont Yankee by calling for the use of new technology that dramatically reduced airborne radiation. When the industry resisted, I required Vermont Yankee to enter into a contract with the State to use the best available technology to control radiation and to accept State monitoring, protecting the Connecticut River and the people of Vermont. The Atomic Energy Commission later accepted these technologies as their industry standard.

Throughout my time in Congress I have continued to work for a comprehensive solution to our nuclear waste problem. Back in 1977, I introduced a bill in the House calling for a comprehensive nuclear waste disposal strategy. I maintained then, as I do now, that finding an effective solution to the waste problem is critical to the future of nuclear power in this country.

So I have been working on this problem for a long time. I have supported the Yucca Mountain proposal in the past, in the belief that it would resolve the problem, and contain both our past and future nuclear waste.

However, the truth is that Yucca Mountain will not provide this solution. It is now clear that Yucca Mountain will only take part of the waste, leaving some, if not most, of the future waste that will be produced sitting along the banks of rivers, beside both our small local communities and our largest population centers. This is not adequate. This is not acceptable.

Therefore, despite my past voting record on this issue, I will cast my vote today against the sitting resolution for Yucca Mountain, because it does not finish the job we must do. Unlike my previous understanding, the Yucca site will not provide a sound, permanent and comprehensive solution to the problem of our nuclear waste disposal. All it does it provide a partial measure, one that can lull us into a false sense of security that the issue is taken care of. It is not.

I understand that Yucca Mountain, if approved today as I assume it will be, will take some of the waste, both from my State and others. That is of course helpful, as far as it goes.

But Americans should not be misled into believing that the Yucca Mountain site will solve America's waste problem. I would be derelict in my duties were I not to dispel this motion. I do so with my vote today in opposition to the Yucca Mountain proposal, under its current limitations. I do so not because I don't recognize that Yucca has the potential to provide some relief to storage concerns at Vermont Yankee and other sites. I take this vote instead because we cannot allow it to be viewed as the panacea to our nuclear waste storage problem.

We must continue to work with the nuclear industry and with the administration to find a safe and comprehensive solution to this extremely vexing problem. We cannot rest on our laurels for the next 10, 20 or 30 years, only to wake up to expanded nuclear waste piles with nowhere to go.

I trust my vote today will help emphasize this continuing need, and our continuing obligation.

I take this vote only after many long hours of carefully examining the facts of this matter. The truth is, I am more concerned than ever that we are just delaying the problem. Vermonters need to know that under the Yucca ''solution'' high-level waste is still likely to be stored forever on the banks of the Connecticut River. All Americans need to know similar waste storage problems will still exist on our Nation's waterways.

Over the years, I have consistently supported a central storage solution for nuclear waste. I continue to believe that it is essential that we find a permanent, central storage site if we are to continue to produce nuclear power.

The current proposal before us is merely a partial, interim step, and must be recognized as such. We must not just blindly continue to produce nuclear power, without a comprehensive and safe solution to the disposal of the waste we produce.

I urge my colleagues and this administration to not relax our diligence in focusing on the next step, a real and

comprehensive solution to nuclear waste disposal.

Mrs. FEINSTEIN. Mr. President, I am voting against this resolution. I support the development of a long-term strategy of storing our Nation's nuclear waste. However, a single storage repository is not the answer to our nuclear waste problem.

I have three major concerns about the proposed Yucca Mountain nuclear waste repository: first, the repository's inadequate storage capacity, second, the environmental risks of storing nuclear waste at the site, and third, the risks of transporting nuclear waste to the site.

Based on these factors, I believe it would be a mistake to bring all of our Nation's nuclear waste to Yucca Mountain. Instead of a single repository, it would be better to develop regional nuclear waste permanent storage facilities which would increase overall storage capacity and reduce risks associated with transporting waste great distances.

Today nuclear waste is stored at 131 facilities in 39 States. These facilities hold nearly 47,500 metric tons of nuclear waste. This amount is growing rapidly. Within 40 years, it is estimated that our country will have generated nearly 108,000 metric tons of nuclear waste.

The Yucca Mountain repository, as I understand it, is authorized to hold only 70,000 metric tons. So at our current rate of nuclear waste production, we will have generated this amount by the earliest estimated date of the repository's opening in 2010. In fact, we may generate the full 70,000 metric tons of nuclear waste before the site ever opens.

What is the point of creating a storage site that will be filled to capacity before it even opens?

I am very concerned about the environmental risks surrounding the site storage. DOE was supposed to recommend or reject the Yucca Mountain repository with geologic considerations to be the primary criteria. I find it disturbing that the suitability of the Yucca Mountain repository has instead focused on container material.

These titanium waste containers are DOE's principal method of providing safety and security of the nuclear waste and repository and ensuring the protection of surrounding areas.

Yet how can we be so confident in our support of such containers when we don't know about their longevity and durability?

The Nuclear Waste Technical Review Board, which was established by Congress specifically to ensure that a repository adequately protects the public health and the environment and it has voiced similar concerns. Last year, the board termed the technical basis for DOE's repository performance estimates as ''weak to moderate.''

As a result, the NWTRB has limited confidence in current performance estimates generated by the DOE's performance assessment model. The board has found that high temperatures in the DOE's repository design increase uncertainties and decrease confidence in the performance of these metal storage containers.

According to Dr. Jared Cohon, the chairman of the board, ''gaps in data and basic understanding cause important uncertainties in the concepts and assumptions on which the DOE's performance estimates are now based.''

The half-life of these titanium storage containers is still unknown. Scientists have found that the first container failures could occur after 10,000 years, although one board member said it was ''hopeless'' to know how long the container would last, given just a few years of research. Perhaps failure could occur much sooner.

In comparison, Uranium 235, the basic fuel used by nuclear reactors, has a half-life of 704 million years.

It would be simply irresponsible for us to bury such hazardous nuclear waste when we don't have a good idea about how long the containers could hold up.

One of the most significant problems found at the site is the amount of subsurface water present under Yucca Mountain. Water promotes corrosion and movement of radioactive material and its presence in a repository is a serious drawback. As the titanium casks erode over time, we could face a potential disaster as this water becomes contaminated and flows into the water table.

California counties have expressed their rightful concerns of subsurface water at Yucca Mountain surfacing at populated areas downstream of the site.

For instance, Inyo County in California, with a population of 17,945, lies downstream of the proposed repository. Contaminated water could very easily spread from the repository directly into their towns and homes.

Death Valley, one of our Nation's ecological and environmental treasures, is also only about 20 miles from the repository. Water contaminated with nuclear waste could destroy one of the jewels of our National Park System.

DOE refutes the idea of possible harm of water contamination based on the titanium casks the Department has proposed to store the nuclear waste.

Yet in March of 2001, the NWTRB wrote to DOE expressing its concern that important water flow processes around Yucca Mountain remain poorly understood and should be further studied.

The board has criticized the lack of critical corrosion data on the titanium casks in the DOE's basic design concept. According to the board, ''We are betting the performance of the systems on the long term performance of these effectively new materials.''

The fact is we simply do not know enough about the durability of these containers and how they will hold up under intense natural conditions for thousands of years.

If we are so confident of the safety and durability of these titanium storage casks, why not use them to store nuclear waste at or near existing reactor sites and thereby eliminate the risk of transporting these hazardous materials across the country?

The most immediate question that need to be answered, however, is, how will we transport all of our nuclear waste to Yucca Mountain? While some argue that the repository will increase national security by decreasing the number of storage sites, the transportation of nuclear waste to the site would actually create thousands of moving targets.

In order to move the Nation's nuclear waste to the Yucca Mountain repository, DOE would have to transport thousands of metric tons of nuclear waste across the country and those shipments would take decades just to move the waste that has already been generated.

Keep in mind that nuclear power provides a quarter of our Nation's energy needs and we generate hundreds of spent nuclear fuel rods each day and nearly 2,200 metric tons of nuclear waste each year.

If we had a way to magically move all of the nuclear waste to Yucca Mountain, it might be safer to have a single repository. However, this is not the case and the transportation of nuclear waste poses unnecessary risks for accidents and attacks.

According to DOE, it would take an estimated 24 years for the full 70,000 metric tons of nuclear waste to be transported to Yucca Mountain.

DOE has not yet determined exactly how this nuclear waste would be transported. The Department estimates that it would take 53,000 trips by truck over the proposed 24-year time period. If the nuclear waste traveled by train, that scenario would involve an estimated 10,700 rail shipments.

The site is scheduled to open in 2010 according to DOE's earliest predictions and at the end of all shipments in 2034, there would still be: nearly 42,000 metric tons of commercial nuclear waste stored in 63 nuclear power plant sites in 31 States; and about 7,000 metric tons of DOE generated waste stored in 4 states.

This is why I believe a single repository is not capable of meeting our long-term nuclear waste storage needs.

Such shipments present unnecessary risks in transporting numerous shipments of hazardous materials from New England to Nevada.

As a result of this plan, significant amounts of nuclear waste will undoubtedly move through or near populated urban areas, potentially jeopardizing the safety of millions of Americans.

And commercial spent nuclear fuel from nuclear power reactors would comprise about 90 percent of the waste shipped to the repository. DOE has acknowledged that this waste is ''usually intensely radioactive.''

According to DOE's Final Environmental Impact Statement, (FEIS)

more than 123 million people currently live in 703 counties traversed by DOE's proposed highway routes and 106 million live in counties along DOE's proposed rail routes.

Using potential truck and rail transportation routes identified by DOE, the Environmental Working Group, a national environmental research organization, estimated that waste shipments to the Yucca Mountain repository could pass within a mile or less of 14,510 schools, 933 hospitals and the homes of 38.5 million people.

When the distance from routes is expanded to 5 miles, waste shipments could pass 36,228 schools, 1,831 hospitals and the homes of 109 million people.

Preliminary routes in Southern California slate waste from the Diablo Canyon powerplant to be shipped about 200 miles on a barge to Port Hueneme in suburban Ventura County just north of Los Angeles, which is one of California's five busiest ports and the nation's biggest export site for citrus.

These shipments pose potential threats to some of the most densely populated areas in the U.S.

Additionally, routine radiation from shipping casks poses a significant health threat to workers handling such shipments.

In the most extreme example, motor carrier safety inspectors could receive cumulative doses large enough to increase their risk of cancer death by 10 percent or more and their risk of other serious health effects by 40 percent or more.

According to the Nevada Agency for Nuclear Projects, public perception of transportation risks could also result in economic costs to those communities along shipping routes. Even without an accident or incident, property values near these routes could decline by 3 percent or more. In the event of an accident, residential property values along shipping routes could decline between 8 percent and 34 percent, depending on the severity of the accident.

DOE takes great pride in its record of safe transportation of hazardous materials for over more than 30 years. During that time, there have been only eight accidents and none of them resulted in the harmful release of radioactive material.

However, during that time period, we were moving fewer than 100 shipments per year.

Over the next 24 years, there would be an estimated 2,200 shipments per year heading to the Yucca Mountain repository alone. There would also be more than 10,700 cross-country shipments occurring at an average of 450 per year.

This enormous increase in shipments would greatly increase potential accidents.

According to the National Highway Traffic Safety Administration, 457,000 large trucks were involved in traffic crashes in the year 2000 alone.

According to the FEIS, a very severe highway or rail accident could release radioactive materials from a shipping container, resulting in radiation exposures to members of the public and latent cancer fatalities among the exposed population.

The July 2001 Baltimore rail tunnel fire has been cited as an example of the dangers of shipping nuclear waste by train.

The fire burned for 3 days with temperatures as high as 1500 degrees Fahrenheit. A single rail cask in such an accident could have released enough radioactive material to contaminate an area of 32 square miles.

In addition to the harm inflicting surrounding populations, the FEIS estimates the clean-up costs of such an accident could potentially reach $10 billion.

Failure to clean up the contamination of such an accident could cause 4,000 to 28,000 cancer deaths over the next 50 years. Between 200 and 1,400 latent cancer fatalities would be expected from exposures during the first year.

A successful terrorist attack using high energy explosives could result in similar destruction and damage.

The FEIS concedes that a high-energy explosive device could rupture the wall of a truck cask, leading to the dispersal of contaminants into the environment. A single blast resulting in 90 percent penetration of a truck cask could lead to 300 to 1,800 cancer fatalities. Full perforation of a cask could cause 3,000 to 18,000 cancer fatalities. Cleanup and recovery costs of such an incident would exceed $10 billion.

These threats should be taken very seriously and this assessment furthers my belief that the long and complex transportation of nuclear waste to a single site is a threat to our national security.

Based on these concerns, I do not believe that Yucca Mountain is the answer to our current nuclear waste security nor our long term nuclear waste storage problem.

According to Dr. Victor Gilinsky, a former Commissioner of the Nuclear Regulatory Commission, Yucca Mountain is not needed to continue, or even expand, nuclear power use. There is ample opportunity to expand existing, NRC-approved, on-site storage. As he testified before the Senate Energy Committee:

> the important thing now is to recognize that there is no immediate crisis, that there is time to do this and to do a good job and responsible job in terms of safety and security, and to do it at a much lower cost to taxpayers than Yucca Mountain represents.

I believe a regional system will provide us with both immediate and long-term results. Immediate in the sense that we can explore expanding storage at current NRC-approved sites. Long-term in the sense that it will produce a system of regional permanent storage sites that will meet our long-term nuclear waste storage needs.

I cannot support a site that does not have the capacity to meet our Nation's long-term nuclear waste storage needs and poses serious risks to our environment and national security. A system of regional storage repositories could eliminate these risks and provide the adequate and safe permanent storage of nuclear waste that our country needs.

Mr. AKAKA. Mr. President, I rise today in opposition to House Joint Resolution 87, the Yucca Mountain resolution, to approve the development of a repository for the disposal of high-level radioactive waste and spent nuclear fuel, pursuant to the Nuclear Waste Policy Act of 1982.

Since the advent of nuclear power nearly 50 years ago, we have been concerned about the problem of waste generated by the production of electricity. Today we are considering a decisive step towards a solution to the dilemma of high-level nuclear waste as mandated by the act. But the path forward is not risk-free.

There are problems associated with the siting. The General Accounting Office has raised serious questions regarding the seismology, stability of the repository, and long-term effects of heat, water and chemical processes in and around the waste containers.

I am concerned about dangers posed by transporting thousands of tons, and thousands of shipments, of high-level nuclear waste through 43 States. Each truck could potentially carry more long-lived radioactivity than released at Hiroshima. I am sympathetic to those States that face the risk of transportation-related accidents or terrorist attacks. Because of our experience in the Pacific with nuclear testing and resulting exposure to radioactivity, I urge caution when dealing with long-lived radioactive material.

We have similar transport problems on the world's sea lanes. Last week, Japan returned a shipment of mixed plutonium-uranium oxide fuel, MOX, to the United Kingdom because it was sent to Japan with falsified safety data and without proper safety checks. The safety and security of nuclear waste, whether transported on the highways or the high seas, should be of great concern to Americans. During my tenure in the Senate, I have closely monitored the safety and security of shipments of MOX from Europe to Japan for nuclear power purposes. On numerous occasions I have voiced concerns with transportation plans and associated security measures for the shipments of nuclear material in the Pacific. Recent warnings and alarm over the threat of procurement and use of nuclear materials for crude explosive devices known as ''dirty bombs'' heightens the need to be vigilant and careful in the transport of nuclear material.

I am not convinced that the plan proposed by the administration has addressed all of these risks. Clearly, we can't walk away from the nuclear waste dilemma, and the nation must address this intractable problem. We need a scientific rather than a political

solution. In a new approach, Congress should not pre-select a site but provide a process that leads to a scientifically sound solution. I will oppose the motion to proceed, as I am not convinced that this is the best path forward.

Mr. DURBIN. Mr. President, the advent of nuclear power more than 50 years ago brought with it both great promise and great responsibility. Our ability to harness the power of the atom has paid substantial dividends for our society, but it has also left us with the formidable challenge of safely storing the byproducts of nuclear power generation. This is a challenge our Nation must meet so that future generations are not endangered by today's nuclear waste.

Presently, all of the spent fuel from nuclear power plants and research reactors throughout the country remains on-site at each reactor. None of these facilities was designed to safely store that waste on a permanent basis, and leaving spent fuel in temporary storage around the Nation poses both a security threat and an environmental hazard. In Illinois, nearly half of our electricity is generated from nuclear power. Our State contains seven nuclear powerplants, two nuclear research reactors, and more commercial nuclear waste than any other State.

We need to find a safe and permanent way to store this material, and such a storage site has been proposed at Yucca Mountain in Nevada. I have been to Yucca Mountain, which is located 90 miles from Las Vegas on Federal land at the remote Nevada nuclear test site. The waste would be stored more than 600 feet underground but more than 500 feet above the water table, sealed in steel containers placed under a titanium shield. A security force at the Nevada test site is in place to protect the area, and the airspace around Yucca Mountain is already restricted.

When this issue has come before Congress in the past, I have opposed efforts to move waste to a temporary facility at Yucca Mountain before there was a scientific determination of whether waste could be safely stored there on a permanent basis. I had no interest in moving this waste to a temporary place, only to move it again when a permanent repository is finally determined. I also opposed earlier measures that would have mandated dangerously low standards for environmental protection at the site.

Recently, however, I have been encouraged by the fact that the Environmental Protection Agency has established radiation and groundwater contamination standards for the Yucca Mountain storage site. These standards were derived from recommendations by experts at the National Academy of Sciences and were developed after extensive public comment and scientific analysis. All of these standards greatly exceed the standards debated by Congress in the two previous bills I opposed. Under three bills Congress considered in the past on this issue, the EPA would have been required to issue a single standard limiting the lifetime risk of premature cancer death to 1 in 1,000, or .001. The current EPA standard assumes a risk of 8.5 in 1,000,000, or .0000085. Furthermore, these bills would have prohibited a standard for groundwater, which EPA has now put in place. If the Department of Energy is able to move forward with a licensing application for Yucca Mountain, the Nuclear Regulatory Commission will be charged with making sure that the Department of Energy proves it can meet the EPA's standards. If it cannot prove this, the Yucca Mountain project cannot move forward.

No site will ever be perfect for the storage of high-level nuclear waste, but I believe the studies which have already been conducted and the Nuclear Regulatory Commission review still to come provide sufficient assurances that Yucca Mountain is the most appropriate site available and should be used as the permanent national nuclear waste repository.

I am still concerned, however, with the movement of thousands of tons of nuclear waste across the country to Nevada. According to the U.S. Department of Energy, Illinois would rank seventh in truck shipments in what is called the ''mostly truck scenario.'' The same Energy Department analysis concludes that Illinois would rank sixth in rail shipments in the ''mostly rail scenario.'' Although waste has been shipped through Illinois and other states in the past, approving Yucca Mountain would initiate the largest waste shipping campaign in the history of our country, both in terms of the number of shipments and the amount of miles traveled for high level nuclear waste.

Unless we scrutinize safety factors and security risks, the large-scale transportation of radioactive materials has the potential to cause a host of serious challenges to cities and communities along shipping routes. The U.S. Conference of Mayors has expressed concerns about the transportation plan, and I am submitting for the RECORD a letter sent to President Bush on this matter, signed by Mayor Richard M. Daley of Chicago and 17 other mayors. This issue is all the more important in light of the terrorist threats we are likely to face in the years ahead.

Illinois is home to one of the busiest transportation corridors in the Nation, putting our State squarely at the intersection of the nuclear crossroads. With the safety of Illinoisans at stake, finding the safest way to move nuclear waste to a location where it poses the least risk is imperative.

That is why I am introducing legislation in the Senate that would direct the Federal Government to develop a comprehensive safety program for nuclear waste transportation. This legislation would require the waste containment casks to be tested to ensure they could withstand intense fires, high-speed collisions and other threats that may occur during transport. My bill also would require States to be consulted on the selection of transportation routes and would require a 2-week advance notification of waste shipments. I also would ban inland waterway shipments of nuclear waste, require dedicated trains and establish a minimum number of trained escorts to accompany each nuclear waste convoy. I am looking forward to working with my colleagues who share my interest in this legislation.

Congress should move forward with making Yucca Mountain the central repository for our Nation's nuclear waste. It is, I am convinced, the best solution to a complicated problem we have debated for decades. But before shipments to Yucca Mountain begin, we need to establish a transportation plan to ensure the safety and security of the communities that lie in the path of those shipments, and we must begin that work today.

I ask unanimous consent to print the letter in the RECORD.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

THE U.S. CONFERENCE OF MAYORS,
February 23, 2002.

Hon. GEORGE W. BUSH,
The White House,
Washington, DC.

DEAR MR. PRESIDENT: Your approval of Yucca Mountain in Nevada as a nuclear waste repository was a historic moment in the history of the project. Quite literally, it is the culmination of over 50 years of scientific research and analysis. Since the Atomic Energy Act was passed in 1954, the federal government has been searching for methods to dispose of spent nuclear fuel and high-level radioactive waste.

As a single largest federal government project in the history of the United States, we acknowledge that the Yucca Mountain project has detractors and supporters. Regardless of the final repository location, we have serious concerns about the transportation of spent nuclear fuel from reactors all over the country to Yucca Mountain or any other repository.

So far, the preliminary estimates that have been released call for up to 10 shipments of nuclear fuel each day for close to 40 years. These shipments will travel through America's cities past our schools, homes and places of business.

In 1996, The United States Conference of Mayors adopted policy on the transportation of radioactive waste that calls for the federal government to fund training and equipment that will be needed by local emergency response personnel along transportation routes, to upgrade medical facilities which would treat victims of transportation accidents, and to upgrade highway and railroad or highway bypasses to ensure safe transportation corridors. It also calls on the Nuclear Regulatory Commission to certify shipping transportation containers after a public process that includes both physical testing and computer modeling to ensure that the containers can withstand severe accidents.

As mayors, we are concerned that the Department of Energy (DOE) has not yet fully researched the methods for the transportation of nuclear waste. A recent incident that illustrates our concern is the 2001 Baltimore Tunnel fire. Five days passed before fire fighters could gain access to the blaze

and control the flames. Several studies have been done to determine the environmental impact if that train had been carrying spent nuclear fuel—and the results have been disturbing.

Given the long-term nature of the Yucca project, it seems only natural that the DOE would include transportation analysis and an environmental impact study in its final report. We respectfully request that the Office of the President of the United States initiate one.

As the mayors of potentially affected cities, we urge you to continue your dedication to public safety and homeland security by supporting a thorough study on nuclear waste transportation to the final repository.

We look forward to working with you on this very important issue.

Sincerely,

(Signed by 18 mayors.)

Ms. SNOWE. Mr. President, I rise today in support of S.J. Res. 34, a joint resolution approving the site at Yucca Mountain, NV, for the development of a repository for the disposal of spent nuclear fuel and high-level radioactive waste, pursuant to the Nuclear Waste Policy Act of 1982.

As we are aware, under current law, Energy Secretary Abraham recommended the Yucca Mountain geologic site as the repository for the Nation's spent nuclear fuel and high-level radioactive waste to the President on February 14, 2002, and the President then recommended the site to Congress the next day. Under law, on April 8, Nevada Governor Guinn exercised his right to veto the Yucca Mountain site. This veto will block further development of the site unless the Congress acts by passing an approval resolution that is signed by the President by July 27.

In 1982, legislation was crafted in response to the need to dispose of the Nation's spent nuclear fuel and high-level radioactive waste that has been collecting since the growth of the nuclear power industry started in the 1950s. The waste is now being stored in various ways in 131 locations across the country.

The Nuclear Waste Policy Act of 1982, the NWPA, called for disposal of this spent nuclear fuel in a repository in a deep geologic formation that would not be disturbed for thousands of years. An office was established in the Department of Energy to develop such a storage repository, the costs of which would be covered by a fee on nuclear-generated electricity and paid into the Nuclear Waste Fund.

My experience with the storage of the Nation's high-level nuclear waste covers the entire 20 year lifetime of the NWPA. In the 99th Congress, I introduced a bill in the House, H.R. 4664, with 23 other Representatives to amend the NWPA. The bill called for the disposal of high-level radioactive waste and spent nuclear fuel in a single national repository. At that time, the NWPA called for two repositories, one in the East and one in the West. I was also a cosponsor of H.R. 4668, the Broyhill bill that removed the requirement of a second repository for the disposal of high-level radioactive waste and spent nuclear fuel.

Our successes came in the next Congress, the 100th Congress, when language I developed with then Representative Mo Udall was ultimately included in the fiscal year 1988 Concurrent Budget Resolution that went on to be signed into law as Public Law 100–203. The language called for the establishment of one national repository. Language was also added at that time that established Yucca Mountain as the only site to be considered for the repository.

Through all of those years, and especially since 9/11, I have continued to believe that the Nation's spent nuclear fuel could be more safely stored at one secure federally guarded facility than at temporary storage facilities all around the country. It would also be less expensive to State governments, which have already taken on the responsibility of dealing with the storage of low-level radioactive waste within their borders.

I do not believe that leaving the spent fuel at commercial and DOE sites for 10,000 years while having each site take the necessary security precautions and storage upgrades is the best approach, especially as the DOE itself has predicted that leaving the spent fuel stored on all of the numerous sites throughout the country would result in a radioactive material release, contaminating soil, surface water, and groundwater.

In Maine, we have a nuclear plant being decommissioned—Maine Yankee—that has been waiting for the Federal Government to take the waste that it should have taken by law by 1998, but has still failed to do so since no facility is ready to store the waste. In fact, Maine Yankee is seeking $120 million through a lawsuit against DOE because the Federal Government has not lived up to their part of the bargain.

The nuclear power plant stopped operating in 1997, but 1,434 spent fuel assemblies still sit at the site waiting for a permanent Federal solution. The company has now spent about $60 million to build a dry cask storage facility and will spend at least $4 million per year to operate it. This is not a unique case as there are a total of 26 power plants no longer in operation that also have waste waiting to be shipped. By 2006, 60 reactors will run out of original storage space, with 78 running out by 2010.

Even after we pass this resolution and the President signs it, the repository will still need to meet the strict requirements of the Nuclear Regulatory Commission to be licensed, and if the Yucca Mountain site receives approval, it will not even be ready to accept spent fuel before 2010 at the earliest. We simply cannot wait any longer to move this issue forward.

I understand that concerns have been raised about the transportation of the spent fuel—and these should be raised and the public should be assured that security plans are in place for safe transportation. We do, however, have a decade to assure that the waste will be safely and securely shipped to the Yucca Mountain site from all parts of the country. Indeed, history tells us that past shipments have been carefully managed. The nuclear industry has completed 3,000 shipments of spent fuel over 1.7 million miles by highways and railroads since 1964. Eight accidents have occurred, four of which had fuel in the shipping containers, but no radiation was released. In the next decade, we can expect even greater safety of shipments through improved technology.

I was pleased to support Senator CARNAHAN's amendment to the recently passed Senate energy bill that calls for a National Academy of Sciences study on how DOE chooses spent nuclear fuel transportation routes, and to do risk assessments of all of the potential routes. This should clarify the transportation issue even more for the public and I urge the conferees to keep this provision in the conference report.

The Federal Government has already spent $7 billion on the Yucca Mountain site, and will ultimately spend about $50 billion more up to the time when the site is expected to reach capacity and is closed in 2019. We must move forward responsibly to once and for all safely and securely store the Nation's highly radioactive spent fuel and nuclear waste at a single national location or, as the DOE has projected, the cost will climb to the trillions of dollars. We can neither afford this or afford to wait any longer.

Mr. GRASSLEY. Mr. President, in 1982, Congress required the Federal Government to find a permanent repository for the disposal of spent nuclear fuel. Now, 20 years later, we are finally taking the necessary action to move ahead with this plan.

Yucca Mountain was recently designated as a suitable site for development as the Nation's permanent repository, with over 24 years of Federal research and scientific evaluation. The Secretary of Energy, after thoroughly examining the relevant scientific and technical materials, concluded that the site is scientifically and technically suitable for construction of a repository. Now, it is up to Congress to ensure that we provide a safe, permanent storage facility.

In this time of heightened terrorist threats, it is absolutely necessary that the Government provide safe and secure permanent storage for our spent nuclear fuel. Currently, spent nuclear fuel and high-level radioactive waste is stored at 131 sites in 39 States.

We can no longer afford to continue storing nuclear waste in temporary sites that are too often located near densely populated areas and water supplies. It seems only logical to want to safeguard public health and safety by storing nuclear waste at a site that

would be highly guarded against any terrorist activity.

Even in my home State of Iowa, spent nuclear fuel from the Duane Arnold plant is stored just outside of Cedar Rapids near the town of Palo. Like too many other facilities in the United States, the plant is being forced to construct temporary storage because of the Federal Government's lack of action on a permanent facility.

And, just 10 miles from the Iowa border, at a plant that ceased operation in 1987, sits 42 tons of nuclear waste in a waterpool that is designed for temporary storage during operation, not permanent storage. It's for these reasons that it is crucial the Senate move forward in designating Yucca Mountain as a permanent storage facility. Storing nuclear waste at Yucca Mountain would protect public safety, health and the Nation's security.

Opponents continue to raise questions concerning the safety of the transportation of this material to Nevada. For over 30 years, there have been 2,700 shipments of spent nuclear fuel without a single release of radioactive material harmful to the public or the environment. It is important to remember that because spent fuel is stored at over 100 temporary sites across the Nation, shipments of spent fuel will cross the country whether or not Yucca Mountain is approved.

Secretary Abraham has assured that the Department of Energy will develop a transportation plan and work with State and tribal governments regarding shipments to Yucca Mountain. Iowa's Governor, Tom Vilsack, has also shared with me his support for designating Yucca Mountain, based on the outstanding record of safely transporting nuclear material. Given Iowa's geographic position across major transportation routes, Governor Vilsack relayed that Iowa has consistently met its responsibilities in this regard.

Lastly, those who oppose the transportation of the waste across the country because it could be a terrorist target have clearly disregarded the fact that spent fuel in secure transit to a permanent repository is far less of a target than the spent fuel scattered across the country at over 100 temporary, stationary sites.

With over 2,000 tons of spent nuclear fuel in Iowa or on it is borders, it's imperative that the Senate take the necessary action today to finally begin the process of developing a permanent repository. To protect our national security, enhance our energy security, and ensure the safety of the public, we must support this resolution and move ahead on this project.

I request that a copy of Governor Vilsack's letter to me dated May 8, 2002, be printed in the RECORD.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

STATE OF IOWA,
OFFICE OF THE GOVERNOR,
Des Moines, May 8, 2002.

Hon. CHARLES E. GRASSLEY,
U.S. Senator, Hart Senate Office Bldg., Washington, DC.

I am writing to encourage your support for the recent decision to go forward with development of Yucca Mountain, Nevada as a permanent repository for our nation's used commercial nuclear fuel and defense nuclear fuel and defense nuclear waste. The State of Nevada has exercised its right to object to the decision. As a result, it is now your responsibility, as a member of Congress, to evaluate, considering the effects on national interest, the decision and affirm its wisdom.

In 1982 Congress established our nation's policy on managing used commercial nuclear fuel and defense waste, i.e., interim storage by commercial reactor operators at their sites and permanent storage at one or more national, geologic repositories by the Federal government. Further, Congress provided for the collection of a fee, levied on customers of electricity generated by nuclear power plants, to be paid into the Federal Treasury and appropriated by Congress for the study and development of a permanent repository. In 1987, Congress, acting to focus the U.S. Department of Energy's efforts, instructed the DOE to exclusively study the site at Yucca Mountain, Nevada.

The DOE acting in accordance with Congress' instructions, studied the Yucca Mountain site in extensive detail. This study validated the scientific wisdom that led to focusing on the Yucca Mountain site in 1987. We should now move on to the next phase of activities and begin the processes of design, licensing, construction and operation of a permanent repository. This is with the full understanding that the licensing and operation of Yucca Mountain still must withstand the detailed scrutiny and additional questioning by the U.S. Nuclear Regulatory Commission which is charged by law to decide whether or not to issue a license to the DOE before a single bundle of used nuclear fuel can move to Yucca Mountain.

Used nuclear fuel is currently stored at commercial reactor sites within and on the borders of the state of Iowa. While this storage has been and continues to be accomplished responsibly, these facilities were never intended as sites for permanent storage and are operated on the presumption that the Federal government will go forward with its responsibility for providing a permanent repository. These same reactor sites provide nearly 25% of Iowa's electric energy.

Customers have paid into the federal fund for the purposes of developing a repository. Study is but a single step towards the final end of developing a useful facility. With the completion of that study there is a ''light at the end of the tunnel'' for those same customers who are bearing the expense of the interim storage within or on the borders of our state.

Congress, in 1982, when it enacted the policy of a national repository, recognized that used nuclear fuel and defense nuclear waste must be transported to that repository. History provides us an outstanding record of transportation of nuclear material. The state of Iowa, with its geographical position across major transportation routes, has consistently met its responsibilities in this regard. The same 1982 act provides for federal support to states to insure that the safety record of future transportation is equally good, if not better.

The decision to move forward on Yucca Mountain and the subsequent objection by Nevada have turned the issue back to Congress to fulfill the national policy it established in 1982: providing a permanent Federal repository for used nuclear fuel and defense nuclear waste. Science affirms the wisdom of Congress' decision in 1987 to focus on Yucca Mountain. Customers and our nuclear reactor operators have provided money and interim storage while waiting for a permanent repository.

It is now time for Congress to stand behind its original decision and vote to move forward with Yucca Mountain. I ask for your support on this important issue.

Sincerely,

THOMAS J. VILSACK,
Governor.

Mr. KOHL. Mr. President, today the long struggle to find a permanent repository for nuclear waste came one step closer to completion. The Senate has decided to over rule Nevada's objection to storing nuclear waste at Yucca Mountain with a strong majority. This is a victory I supported, but not one I can be happy about because it forced me to vote against my leadership.

I supported moving the waste to Yucca Mountain for three main reasons. First, the opening of Yucca Mountain means that Wisconsin will have one less site storing nuclear waste as the Dairyland Power Cooperative's decommissioned reactor will finally be able to get rid of the waste stored at its defunct reactor. Second the site has been proven safe after 20 years of study by the Department of Energy and the National Academy of Sciences. Third, the electricity rate payers of Wisconsin have paid more than $250 million over the years for this site, and the Federal Government should fulfill its side of the bargain by providing the repository it promised.

I still have concerns regarding transportation of the waste through our population centers. This is a high stakes situation and every effort needs to be made to choose the best routes, prepare the local emergency response units, and continue to improve the casks in which the waste will be moved. However, the industry's record of thousands of shipments of nuclear waste around the country and around the world without an accidental release of radiation leads me to believe that these concerns will be adequately addressed.

I understand the concerns some of my colleagues have on the safety of the Yucca Mountain site. What we are asking science to do by proving that this site will be safe for tens of thousands of years is unheard of, and may well be beyond our current capabilities. But this site, on the Nevada Nuclear Test site, is certainly safer than leaving this waste at 132 sites nationwide. Sites scattered around the country that were never designed to be a permanent solution. This mountain has been carefully studied and will continue to be closely monitored. We will not walk away from Yucca Mountain but will watch it closely for generations to come.

Burying our waste problems for future generations to deal with is not something we should be proud of. I hope the Congress and the administration will continue to fund nuclear research that will investigate ways to

neutralize this waste. The repository at Yucca Mountain doesn't have to be the last word on nuclear waste, and I hope we can do better in the future.

Mr. FEINGOLD. Mr. President, I want to share my views on the Yucca Mountain resolution. Specifically, I want to review the issues that I have considered in examining this legislation that have led me to vote against the motion to proceed to this measure. In short, while I believe that Yucca Mountain ultimately may be the appropriate place to permanently store our country's nuclear waste, the Senate is considering proceeding to this resolution today without having addressed two key concerns: the Congress has not ensured that the Yucca Mountain site is of sufficient size to house our country's nuclear waste and the Congress does not yet know the Administration's plans for ensuring that the transportation of waste to that site is safe and secure. In addition, considering this premature resolution does nothing to get the waste to Yucca Mountain more quickly because the Federal Government must complete a number of remaining regulatory steps and build the site.

Let me first express my grave concern about the process by which this resolution has been brought to the floor. The Nuclear Waste Policy Act of 1982, amended in 1987, establishes a process for the Federal Government to designate a site for a permanent repository for civilian nuclear waste. In February 2002, this process culminated in a Presidential recommendation for a repository at Yucca Mountain, NV. On April 8, 2002, the State of Nevada exercised its authority under the law to disapprove the site. As a result of this State disapproval, the site may be approved only if a joint resolution of repository siting approval, which we are now considering, becomes law.

The Nuclear Waste Policy Act also establishes an expedited procedure for congressional consideration of the Yucca resolution. The purpose of an expedited procedure is to facilitate the ability of Congress to dispose of the matter specified in a timely and definitive way. To this end, it establishes a means for Congress to take up, and complete action on, the resolution of approval or disapproval within a limited period of time. I am concerned that we are taking this action today and we are still several years away from a final siting decision on Yucca. The Nuclear Regulatory Commission is still several years away from issuing a construction license for Yucca, there is no transportation plan, and the transportation containers to be used for waste shipments to a permanent storage site have also not been approved by the Nuclear Regulatory Commission. Thus, while Yucca may be the right site, this is the wrong time to have Congress ''approve'' the site while so many regulatory questions are yet unanswered.

I have always felt that we should be certain that Yucca is the final site before we proceed with final Congressional approval. For those of us who represent states that are grappling with nuclear waste storage questions, the short time frame mandated in law for the consideration of this resolution has made it extremely difficult to analyze its full effects on behalf of our constituents. The issues raised by this resolution are serious policy issues. The Bush Administration knows the resolution approval process is designated by law and has statutorily defined deadlines for Congressional consideration. The Administration should not have jumped the gun and set the clock in motion while there is still a possibility that Yucca might not receive final siting approval in the regulatory process.

During my time in the Senate, I have consistently said that I would prefer that once nuclear waste leaves the State, it leaves permanently. Wisconsinites want nuclear waste removed from our State and stored in a permanent geologic repository out of State so that it has no chance of coming back to Wisconsin. I opposed nuclear waste legislation in the last Congress that sought to build large scale interim storage facilities before the permanent storage site was ready and would have jeopardized consideration of the permanent site. This resolution commits the Federal Government, at least for the near term, to build one such large scale permanent site.

I have heard concerns, however, from some constituents that this resolution to build at Yucca makes Wisconsin more likely to be the next permanent geologic storage site. I am concerned that Yucca, as currently authorized, will not be of sufficient size to take all of Wisconsin's waste. In previous Congresses, though I did not ultimately support interim storage legislation for other reasons, I supported provisions in interim storage bills to expand the size and capacity of the Yucca site. At best, when Yucca is opened, it will leave nearly a quarter of the waste currently in Wisconsin still sitting at our plants. Moreover, if our nuclear plants in Southeast Wisconsin re-fuel in the next few years, the Yucca site is not currently expected to take any new waste.

Yucca's size is an important issue for Wisconsin because Congress is required under law to approve the study and construction of a second waste site, if one is needed. This resolution does nothing to change that provision of law, and it remains unclear whether the Department of Energy would look again at Wisconsin or the other sites considered in the 1970s and 1980s. If it needed more storage capacity, the Department of Energy could ask Congress to expand Yucca's size or recommend another alternative geologic site. As a Wisconsin Senator, I have serious concerns regarding the construction of a geologic storage site in Wisconsin. In the past I have opposed legislation opening up the possibility of a second site, and would express those concerns strongly in any discussion of a second permanent location.

One of my main concerns has always been the safety and security of shipping nuclear materials from their current locations to a permanent geologic storage site outside of the State. Obviously, there is a risk that, during the transportation, accidents may occur. While many have suggested that waste has been shipped safely across the country during the history of nuclear power in this country, there has never been a coordinated efforts to ship waste to a centralized storage location. The opening of Yucca Mountain would initiate an unprecedented shipping program. I am concerned that the Final Environmental Impact Statement for Yucca Mountain now includes barge transport on the Great Lakes and extensive truck transport on highways as potential transportation routes in addition to rail transport.

This resolution does not enhance our transportation safety, and our current transportation regulatory program must be strengthened. In fact, I believe that additional legislation may be needed to address a number of transportation issues. I still feel that the Senate must act in the near term to ensure that state and local governments have the financial and equipment resources they need to respond to accidents and protect public safety. Congress must insist on a comprehensive safety program for nuclear waste transportation. We must require the waste containment casks to be tested to ensure they could withstand intense fires, high-speed collisions and other threats that may occur during transport. It is also essential that states be consulted on the selection of transportation routes and are given longer advance notification of waste shipments. Other measures that need to be addressed include banning both open water and inland waterway shipments of nuclear waste, requiring dedicated means of shipping, and establishing a minimum number of armed escorts to accompany each nuclear waste convoy.

In conclusion, I cannot support this proceeding to this legislation which purports to provide an interim fix to the country's nuclear waste problem. I realize that this action is not the final say on Yucca Mountain and that we have many more steps to go before Yucca is built. But this site cannot serve its national purpose if we cannot get the waste there safely or if it is too small to hold the waste. We should have addressed these important considerations before proceeding to this resolution.

Mr. LEVIN. Mr. President, I am supporting the Yucca Mountain Resolution today because we need to take the next step in resolving the problem of nuclear waste in this country. It makes more sense to store the Nation's high-level nuclear waste in a single place than it does to leave it at 131 sites spread all around the country, many close to significant population centers

and all located on bodies of water, including the Great Lakes and major river systems. I do not feel that it is environmentally responsible to allow spent nuclear fuel to sit indefinitely in temporary facilities on the shores of the Great Lakes. We set up a procedure 20 years ago to deal with this problem, and we should use it.

I have heard from citizens all over Michigan on both sides of this issue. The Michigan Municipal League, the Michigan House of Representatives, and over 75 counties and communities have contacted me to express their support for the effort to establish a permanent repository at Yucca Mountain. This resolution will permit the Department of Energy to submit an application to the Nuclear Regulatory Commission so that the Commission can determine whether established regulatory requirements for the protection of public health, safety and the environment have been satisfied. The Nuclear Waste Policy Act, which was passed 20 years ago, did not leave it up to Congress to decide whether or not Yucca Mountain is a suitable location for our nuclear waste. Rather, it left this decision up to the Nuclear Regulatory Commission. If this resolution is approved, a license application will be submitted by the Department of Energy for Yucca Mountain and over the next several years, the Nuclear Regulatory Commission will go through all of the scientific and environmental data and look at the design of the repository to make sure that it can meet environmental and safety standards. This will be done by scientists and technical experts.

I share the concerns of many people regarding the storage and shipment of nuclear waste. Terrorism and transportation issues need to be thoroughly addressed in the licensing process. Transportation plans will be developed in a staged process over time and all plans will go public with opportunities for input from the States and local communities. The actual transportation routes are a long way from being determined. Further, the Department of Energy assures us that there are no plans to use barges to transport waste, and I will oppose any effort to do so.

Since 1983, the people of Michigan have committed more than $400 million to the Nuclear Waste Fund for environmental protection that they have not received. The Palisades nuclear power plant near South Haven has a total of 432 spent fuel assemblies stored in 18 dry casks located on site. An additional 649 spent fuel assemblies remain in the spent fuel pool and will ultimately be transferred to dry casks. The Big Rock Point nuclear plant near Charlevoix retains all of its spent fuel in a pool inside the containment building. The plant is permanently shut down and is in the process of being decommissioned. Beginning early next year, the plant's 441 spent fuel bundles will be loaded into 7 dry casks and stored on site. These casks are designed to be an interim measure. They are not a permanent solution. Each nuclear plant site in the U.S. has become a de facto spent fuel storage facility. It would be more efficient and more secure to move all of the spent fuel to one central facility where it can be safely stored indefinitely. Further, in the case of Big Rock Point located near Charlevoix, the plant and equipment will be completely removed from the property within the next few years. All that will remain will be the spent fuel, sitting on a large concrete pad about one-half mile from the lake. Re-use of the property cannot be accommodated until the spent fuel is removed.

Finally, a permanent repository is also important to support the cleanup of contamination and waste generated by the cold war production of nuclear weapons and materials for these weapons. Currently the Department of Energy is treating high level waste materials, stabilizing them and getting then into other safe configurations so that the waste can ultimately be shipped to a permanent repository. Moving the treated and stabilized waste is particularly key to the cleanup of sites such as the Savannah River Site in South Carolina and the Hanford Site in Richland, WA.

If this resolution does not become law, the only alternative for getting waste out of these many temporary storage sites into a permanent site will be terminated, which would move us in the wrong direction. Leaving the nuclear waste at temporary sites and leaving this decision to future generations is not the responsible thing to do and is not a solution to this problem.

In supporting this resolution, I am supporting an open and rigorous process for answering the concerns raised by so many. Only through this process will we be able to protect the health of the people and the environment.

Mr. LEAHY. Mr. President, since my first days in the U.S. Senate, I have expressed strong concerns about nuclear power. The claims made in the 1970s that nuclear power was going to bring our country cheap, reliable and clean energy have turned out—as many warned at the time—to be far from the truth. While electricity from nuclear power has been reliable, it is neither cheap nor clean. The waste from these plants is an enormous and undisputed economic liability for the Nation, and it is far from environmentally clean.

After all these years of coasting on these false promises about nuclear power, the bill has come due. Today we have 29 years of nuclear waste in Vermont in the form of spent fuel in temporary storage on the banks of the Connecticut River, and we cannot ignore that it needs to be managed. Part of that management, especially since September 11 and all of our heightened security since then, is to better secure on-site waste until it can be transported to a safer location. And part of that management is to create that safer location, officially designating Yucca Mountain as the single, high-security site for the bulk of nuclear waste that is now dispersed across our country.

While I know that some waste will always be located on-site at operating nuclear plants, we must locate the bulk of the waste at a single, secure site. Governor Dean and the Vermont Public Service Department have consistently called on me to support the repository, and today I again respect the wishes and long-term interests of my State.

The vote in the Senate today was about establishing a single national repository for tons of hazardous nuclear waste. I voted in favor. But the question of how nuclear material is safely transported to the Yucca Mountain site brings up a new set of difficult decisions that Congress has yet to face. For the past several months, I have expressed my strong concerns about prematurely transporting nuclear waste across the Nation without a plan that addresses growing concerns of State governments and local communities.

Especially in light of fears after September 11, nuclear waste transportation concerns need to be discussed, debated and addressed by our Nation's leaders. Congress has worked with the administration to improve security at airports, border crossings and public buildings. Yet throughout this Yucca Mountain debate, the Bush administration has failed to fully inform Congress about security improvements envisioned for shipping nuclear waste. It has failed to respond to repeated questions from the American people and their local communities, and that is unacceptable.

Vermonters, in the tradition that has so distinguished our State, have actively studied the issues involved in the Yucca decision. Many have shared their views and suggestions with me, on both sides of this question, and I deeply appreciate their counsel. The approval of Yucca as a repository is one issue that has taken years for Congress to debate and address. This vote does not end the federal government's obligation, by any means. I believe the administration must answer the concerns raised by many Americans in many States about nuclear waste transportation security before any material moves across the country and through hundreds of large cities and small towns. Until then—and until the Yucca Mountain site is truly operational—we must focus our energy on ensuring that all nuclear waste is secured in the safest, strongest on-site storage facilities possible.

The PRESIDING OFFICER. Who yields time?

Mr. MURKOWSKI. Mr. President, I thank the Senator from Arizona. The Senator from Idaho I think would require some 15 minutes.

Mr. REID. Mr. President, I say to my friend, the Senator from Idaho spoke to me and indicated he would like to go now. Senator ENSIGN and I have to be

here, and you have to be here. He doesn't have to be here all the time.

Mr. MURKOWSKI. I am sure he is relieved to hear that, Mr. President.

The PRESIDING OFFICER. The Senator from Idaho.

Mr. CRAIG. Mr. President, thank you.

I thank my colleague for allowing me some additional time to visit with you about what is probably one of the most important environmental votes we will have this session in both the short-term and the long-term perspective of good government policy dealing with the waste stream of our nuclear era and hopefully dealing with it in a way that allows us to move forward to new reactor design.

Ultimately, ensuring America it will continue to have a nuclear industry that will provide the quality of electrical power on which our country will so depend in an environmentally sound way is really an underlying premise of this debate.

Before I discuss that a little more, I thought I would add to the RECORD an interesting fact about precedent. I know my colleague from Nevada is concerned about that as it relates to procedural activity on the floor and what this motion to proceed may or may not mean.

As you know, the comment was made that if anyone other than a majority leader were to make a motion to proceed, the Senate would be seriously harmed. Let me give you a small excerpt of history.

On July 8, 1957, Senator Knowland of California, the Republican minority leader of the Senate, rose and made the motion to proceed to the consideration of H.R. 6127, which was being blocked by the majority and the majority leader.

On July 16, 1957, after a week of debate on just that issue, the Senate voted 71 to 18 to take up the legislation. In other words, they voted on a motion to proceed proposed by the Republican minority leader.

This legislation was the Civil Rights Act of 1957. The majority leader was the then-Senator Lyndon Johnson. And he survived the assault on his leadership very well. I think history will certainly attest to that. The Senate itself has also survived very well.

But what we got through that fight was probably one of the most critical pieces of legislation of a generation if not in the history of this country; and that was the Civil Rights Act of 1957.

The procedures we are following and that set forth in the Nuclear Waste Policy Act are a part of the Senate rules. By the term of the statute, those procedures could be amended in the same fashion as any other rule.

For 20 years, no one has complained about the procedures developed by Senators Jackson, Johnston, Proxmire, and McClure, and others, and eventually put forward by Congressman Joe Moakley, the chairman of the House Committee on Rules.

No damage was done to the Senate in 1957, and it was that precedent that found its way into the 1982 act. Failure to not proceed to and not approve the resolution will not, obviously, in my opinion, advance the issue at hand.

Having said that, I ask unanimous consent that the RECORD of July 8, 1957, be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[Excerpt from the RECORD of July 8, 1957]

CIVIL RIGHTS

Mr. KNOWLAND. Mr. President, the motion I am about to make is to enable the Senate of the United States to perform its legislative function to consider, debate, and vote upon such amendments as may be offered and upon H.R. 6127, otherwise known as the civil-rights bill.

* * * * *

I hope that within this week the Senate of the United States will be allowed to vote on the motion to proceed to the consideration of this important bill.

I feel certain that the Members of this body are both reasonable and fair. If the opponents of the proposed legislation will argue the merits of their case on the bill itself and on the amendments when the bill is before the Senate, they will find that we who favor the Senate's functioning as a legislative body will not be unfair in our judgments or unreasonable in our actions.

The mere fact that a majority may favor bringing this bill up for consideration will not cause us to depart from a procedure of parliamentary conduct that we would consider fair and equitable if applied to us if we were in the minority on this or any similar measure.

Again I appeal to my colleagues to permit the Senate as a part of a coordinate branch of the Government of the United States, to function under section 1, article I of the Constitution, which reads as follows:

''All legislative power herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.''

Mr. President, I move that the Senate now proceed to the consideration of Calendar No. 485, H.R. 6127.

The PRESIDENT pro tempore. The bill will be stated by title for the information of the Senate.

The CHIEF CLERK. A bill to provide means of further securing and protecting the civil rights of persons within the jurisdiction of the United States.

The PRESIDENT pro tempore. The question is on agreeing to the motion of the Senator from California.

Mr. DOUGLAS. Mr. President, what the Senator from California has moved is merely that the Senate proceed to consider the civil rights bill. He is not, at this time, moving its passage. He is simply trying to bring the issue up before the Senate, so that we may then have the chance to discuss and to vote on it.

If the motion of the Senator from California prevails, then, and only then, will it be germane for us to debate the merits of the bill itself and to consider such amendments as may be proposed. But for the present, all that is before us is that we take a prior step and clear the decks so that we can thereafter consider the all-important question of civil rights.

This very simple parliamentary fact creates two guides for action. First, that to filibuster against such a preliminary step as deciding that we will later consider the bill would be a purely negative and obstructive act. The second consequence is equally clear. Until this motion is adopted, it is inappropriate and premature to discuss at any length either the merits of the bill or to consider any amendments thereto. All this will properly come later. But for the moment, all we are contending for is the right of the Senate to take the earlier step, which is logically prior to the discussion of amendments.

Let this immediate issue be crystal clear, and let it be not confused by a deluge of words and a multitude of false leads. It should not need any argument on our part.

Since the motives of those who are supporting this proposed legislation have, however, been called into question, it may be proper if we briefly restate our purpose. What we are trying to do is to make effective in actual life the constitutional rights of all citizens—regardless of race and color—primarily the right to vote. As we all know, this right is guaranteed by the 15th amendment in the following words:

''The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude.

''The Congress shall have the power to enforce this article by appropriate legislation.''

Not only does Congress have the power, but it also has the duty to protect this right to vote against interference by State officials under not only the 15th but also the ''equal protection of the laws'' clause of the 14th amendment.

Furthermore, the Supreme Court has held (*U.S.* v. *Classic* (313 U.S. 299)) that this right to vote in Federal elections is also guaranteed by article I, section 2 of the Constitution, and can be protected by the Federal Government against infringement by individuals as well as by State or local bodies.

All of us know—and this knowledge is supported by statistics and press accounts—that the right to vote is denied to vast numbers of Negroes, particularly in those areas where they are found in large numbers, namely the Southern States. Frequently, this is done by legal and procedural subterfuge, often by social pressure, sometimes by economic pressure, and—upon occasion—by outright coercion. The net effect of all these methods is the practical disenfranchisement of the vast proportion of potential Negro voters of the South.

We believe this is to be a denial not only of constitutional rights, but also of the principles of true religion and of the ideals upon which our Republic was founded. We seek to realize those ideals not by criminal prosecutions after the fact, but by the preventive use of injunctions to prevent such abuses from occurring. All that is asked is that officials and citizens should conform to the law and to the Constitution. If this is done, nothing else need follow, since our aim is prevention, not punishment.

We are concentrating our efforts upon making the right to vote effective, because if this right is guaranteed then many other abuses which are now practices upon the disenfranchised will be self-correcting.

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Mr. DIRKSEN. I announce that the Senator from New Hampshire [Mr. BRIDGES], the Senator from Maine [Mr. PAYNE], and the Senator from Kansas [Mr. SCHOEPPEL] are absent because of illness.

The Senator from North Dakota [Mr. YOUNG] is detained on official business.

If present and voting, the Senator from Maine [Mr. PAYNE] and the Senator from Kansas [Mr. SCHOEPPEL] would each vote ''yea.''

The result was announced—yeas 71, nays 18, as follows:

YEAS—71

Aiken	Frear	Martin, Pa.
Allott	Goldwater	McNamara
Anderson	Gore	Monroney
Barrett	Green	Morse
Beall	Hayden	Morton
Bennett	Hickenlooper	Mundt
Bible	Hruska	Murray
Bricker	Humphrey	Neely
Bush	Ives	Neuberger
Butler	Jackson	O'Mahoney
Capehart	Javits	Pastore
Carlson	Jenner	Potter
Carroll	Johnson, Tex.	Purtell
Case, N.J.	Kefauver	Revercomb
Case, S. Dak.	Kennedy	Saltonstall
Chavez	Kerr	Smith, Maine
Church	Knowland	Smith, N.J.
Cooper	Kuchel	Symington
Cotton	Langer	Thye
Curtis	Lausche	Watkins
Dirksen	Magnuson	Wiley
Douglas	Malone	Williams
Dworshak	Mansfield	Yarborough
Flanders	Martin, Iowa	

NAYS—18

Byrd	Holland	Scott
Eastland	Johnston, S.C.	Smathers
Ellender	Long	Sparkman
Ervin	McClellan	Stennis
Fulbright	Robertson	Talmadge
Hill	Russell	Thurmond

NOT VOTING—6

Bridges	Hennings	Schoeppel
Clark	Payne	Young

So Mr. KNOWLAND's motion was agreed to; and the Senate proceeded to the consideration of the bill (H.R. 6127) to provide means of further securing and protecting the civil rights of persons within the jurisdiction of the United States.

Mr. DIRKSEN. Mr. President, I move that the Senate reconsider the vote by which the motion was agreed to.

Mr. KNOWLAND. Mr. President, I move to lay that motion on the table.

The VICE PRESIDENT. The question is on agreeing to the motion of the Senator from California [Mr. KNOWLAND].

The motion to lay on the table was agreed to.

Mr. CRAIG. Let me also talk about one other issue that we discussed when we talk about the capacity of Yucca Mountain and, therefore, that there will always be waste out there somewhere in these temporary repositories at these nuclear reactors generating our commercial power.

Yes, there will be temporary storage for periods of cooling pretransportation. There would be anyway under any circumstance. But what we are talking about—and the Senator from Nevada showed a dip—is that you can just double the numbers at each one of those, if you want. And doubling the numbers, in my opinion, does have a risk factor, certainly a management factor.

What is most important is that many of these temporary repositories were licensed under State authority for a certain volume. To exceed that means you have to go back to the same State authority that was granted 15 or 20 years ago, versus today, and the politics have changed a great deal, and we know that, because those States were led to believe that the Federal Government would react responsibly in building a permanent repository and the temporary facility would be just that—it would not become a permanent facility. Therefore, it would be a point to cool and a point to transfer. That is what those temporary repositories were always intended to be.

So this really was the hand-in-glove scenario. Do not suggest that one goes without the other at all because they were licensed not for permanency but for temporary status while the Federal Government moved through that time of establishing a permanent repository.

In that context, when we talk about the 70,000 ton cap at Yucca Mountain as a statutory limitation, it may be statutory but it is not physical. We do not know what the physical capability of Yucca Mountain beyond 70,000 tons would be. It could be increased over time 30 years out if, in fact, all of the geology and everything else met the standards that the scientists, through the licensing process, had established.

Twenty years from now, 30 years from now, I will not be here. I doubt that the junior Senator from Nevada will be here. But on another day and in another place, and if that science meets those standards, and it is strong and stable, and the world's perspective has shifted, then, remember, we are dealing with a statutory cap, not a physical limitation, as it relates to Yucca Mountain.

The reason the statutory cap was put in place originally was because we were looking at other repository locations in Vermont, in Washington State, and other places at the time. That is why there was a cap put in place.

I know Senators Cantwell and Jeffords and Wellstone have talked about the limitations and, therefore, the argument that temporary repositories would still have material in them. Remember, of course, any of us who legislate know that a statutory cap is one that could be changed if the politics and/or the science would argue a change were there to do so. So let us not, in any way, fall prey to that argument of limitation.

In that context, let me suggest that limitation is, in part, tied to the geology of Yucca Mountain. I cannot tell you that I was there at the beginning, but I was there during the legislative time when we were looking at a variety of locations for repositories. I had examined them all as a legislator. I read all of the preliminary geologic surveys.

It was determined at that time, in the mid-1980s, that Yucca Mountain was, by far, the site that appeared to be the most desirable other than, if you will, the large granite deposits in Vermont.

Granite has a unique shielding capability, and it is possible to assume that you could put repositories deep into the granite of Vermont and it would be an ideal situation. But our country did not go there. Our country decided not to have multiple repositories, but a single one, largely because of the politics of it.

Governor Guinn, in his arguments of vetoing it, suggested that Yucca Mountain is unsuitable for a permanent repository because it is at the center of volcanic activity, earthquake vault zones, and rapid ground water flow. In other words, that is the geology of the mountain, as spoken to by the Governor of Nevada.

Secretary Abraham has asserted Yucca Mountain is geologically stable and experiences little ground water flow or rainfall.

The U.S. Geological Survey agrees, stating that the arid climate and low probability of repository-piercing earthquakes or volcanic activity support the recommendation of Yucca Mountain.

The Nuclear Waste Technical Review Board also concurred, stating:

> No individual technical or scientific factor has been identified that would automatically eliminate Yucca Mountain from consideration at this point.

That is a quote directly from the report by the technical review group.

Based on these factors, the Energy Committee, on which I serve, examined it and determined that it was fair that we bring this issue to the floor in the form of a resolution and allow ourselves to go to the next step.

And oh, by the way, the U.S. Geological Survey agrees with us. The Governor asserted that the geology of Yucca Mountain is so bad that DOE has given up on geologic isolation of waste in favor of manmade barriers. In other words, the original concept was to create a facility so deep in the Earth that the Earth itself would create the natural barriers, and that you would not need to build a barrier within a barrier, in other words, a manmade barrier.

Secretary Abraham points out that a balance of both natural and engineered barriers has always been planned for the repository.

Existing geologic barriers are likely sufficient to prevent waste from reaching ground water, but the engineered barriers provide additional protection.

Do you remember what we did a couple years ago? Because we wanted to make sure we did it right, because we wanted to address the arguments that were being made, we put EPA into the mix and we extended the idea of engineering out into the future a facility that would withstand 10,000 years of any kind of threat. That is when the barrier within the barrier concept really began to develop.

The Nuclear Waste Policy Act requires the Secretary to consider engineered barriers when making this recommendation to the President.

Long before the Governor got into the argument, and long before the Governor tried to find arguments that would fit his political need, we had already thought of that. It was in the 1982 act. The Nuclear Regulatory Commission, not the committee or the Senate, must ultimately decide if the barriers are sufficient to prevent the seepage of radionuclides. The committee agreed with Secretary Abraham's conclusion that the consideration of manmade barriers is appropriate.

The Governor claims that DOE's computer models are unable to adequately predict emission rates for

10,000 years. The NRC will rely on these models for licensing, as absolute proof of compliance with EPA radiation protection standards is not obtainable. DOE must be able to demonstrate compliance with EPA's standards for the 10,000-year cycle.

The committee is concerned that DOE models are not adequate. The Nuclear Waste Technical Review Board has expressed similar concerns but has given guidance to DOE on improving the quality of its assessments.

In other words, what we are talking about and what the Secretary made his recommendations on was the science far enough along to get us to the point of moving it the next step. The science is not cooked. It is not done. It is not over. It is evolving.

What I am suggesting is that as we question the science, the science we now have is adequate to arrive at reasonable comfort under all of the best engineered scenarios to allow the safety that is required. But for the Nuclear Regulatory Commission and others to require additional science is possible.

The committee expects DOE to improve its computer models but does not believe that existing weaknesses are sufficient to stop the consideration. In other words, we are not even satisfied with the work that has been done, although it is clear—and I must say for the RECORD that the work that has been done is adequate, clearly adequate to get us to this point of consideration. If we can make the best better, and if in that we create the kind of both political and real comfort that the State of Nevada needs, then we ought to do that. That is our responsible role as public policymakers.

Let me conclude with the Governor's objection on what he calls the completeness of the design. The Governor notes that DOE has not completed the design of Yucca Mountain and cites 293 unresolved technical issues. Because of these, the DOE will be unable to submit a license application to the Nuclear Regulatory Commission until 2004, violating a statutory requirement to file an application within 90 days of congressional approval of the President's recommendation. That has been the argument placed by some.

The Nuclear Waste Policy Act requires the Secretary to determine site suitability before making a recommendation to the President. It does not require him to complete the repository design or satisfy every obligation for license application. In other words, the step required by law was met, determining site suitability. It is from that process within the law that moves us to where we are today.

The Nuclear Regulatory Commission is confident that the DOE can supply all necessary information for license review. The 293 unresolved issues are commitments from the DOE to supply additional information. Forty-one of these issues have already been completed, reducing the number to 252.

The Yucca Mountain project is already 12 years behind schedule. The DOE's inability to file an application within 90 days is unfortunate but not a violation of the statute. The provision is a directory, and not a mandatory requirement.

In other words, like the science, we have met the standards but we want to achieve a greater level.

In that regard, as it relates to the law and as it relates to an application to the Nuclear Regulatory Commission, we have met suitability as we now work to address the other issues that will become a part of the licensing process of the Nuclear Regulatory Commission.

The PRESIDING OFFICER. The Senator's time has expired.

The Senator from Nevada.

Mr. REID. Mr. President, I have spoken with the distinguished Senator from Alaska. We both have limited amounts of time to give, but we decided the Senator from Nevada would be given 15 minutes; following that the Senator from Alaska would be recognized to use up whatever amount of his 25 minutes he wished; and following that I will speak and/or the majority leader. That should take all of our time.

I yield 15 minutes to the Senator from Nevada.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. ENSIGN. Mr. President, Nevada's slogan is ''battle born.'' It is on our State flag. It reflects the firmness of purpose and the willingness to fight for what is right that is so much a part of what characterizes Nevada. This is as true today as it was when our State entered the Union during the Civil War.

When it comes to Yucca Mountain, we intend to fight. Nevada's other motto is ''all for our country.'' This is proudly displayed on our State seal. Nevadans have always been for our country. The ore taken from Nevada's Comstock load financed the means by which we preserved the Union during the Civil War, and Nevada has hosted aboveground nuclear testing at the Nevada Test Site, the result being a weapon of such mass destruction that it swiftly brought the end to the World War II conflict.

Too many innocent people in Nevada and Utah died from horrible cancer-related disease from the radiation fallout. So when it comes to our national defense, Nevadans have always proudly stood tall for our country.

Yucca Mountain is not needed for our defense and goes way beyond patriotic duty.

I want to address the transportation issue. These are some charts. Once again, because we don't know the exact transportation routes, these are the charts from the Department of Energy's final environmental impact statement. So it is all we have to go on.

The darker lines—it is probably very difficult to see the real light red lines which are the rail—are the highways. This happens to be in Illinois. Chicago is up here. These are all the various transportation routes. Down here is St. Louis—all the various transportation routes through this part of the country upon which nuclear waste could and probably will travel. This happens to be the State of California. My State is here, but all of these are various transportation routes going through major cities—Los Angeles, Oakland, Sacramento.

This happens to be Colorado, Denver, a major metropolitan area here as well.

This is Utah where we have Salt Lake City. We see the highways and the railroads running through Salt Lake City.

This is Florida, with a huge amount of population today, a very populated State—going through Miami, near Orlando and through Orlando, with the train routes through Jacksonville, Tallahassee.

This is in Georgia—going through obviously their major population center in Atlanta.

This is a summary of the country. These are just the highways across the country. We can see that so much of the country and so many population areas of the country are going to have nuclear waste transported through them. Once again, we don't know the exact routes, but these are the best routes we have to go on.

The Department of Energy and the nuclear industry wants Americans to believe that taking tens of thousands of tons of dangerous radioactive waste, removing it from reactor sites around the country, and putting it on trains and trucks and barges now and moving it through cities and towns and waterways across America so it can be buried on an earthquake fault line in southern Nevada is a good idea. It is not.

According to the Department of Energy, 50,000 to 100,000 truck shipments, 10,000 to 20,000 rail shipments, and 1,600 to 3,000 barge shipments would be required to transport high-level nuclear waste to Yucca Mountain.

The Government is trying to convince us that this project is going to be safe; as a matter of fact, they say more than safe. The Government would have us believe that getting this waste to Yucca Mountain is the key to keeping our children safe from radioactive waste that is going to be dangerous for tens of thousands of years.

Anyone who believes the argument that this dangerous waste can be transported without incident only needs to look at what happened last July in the Baltimore Tunnel when a CSX freight train carrying hazardous waste derailed and set off fires that burned for days. The casks have been studied at about 1,475 degrees using computer modeling—casks similar to that. The Baltimore Tunnel fire burned at 1,500 degrees for days, which is way beyond what these casks have been put through—at least in the laboratories. Imagine a similar incident to that which happened in Baltimore, except this time if it is radioactive waste.

Forget an accident. What about a terrorist attack? People have talked today about the record of shipping nuclear waste across Europe and the United States. But post-September 11, we are in a different world. We need to think about terrorism and the ways and uses and possible attacks on these nuclear canisters as they are traveling across our country. Hijacking or blowing up a truck containing nuclear waste would be an easy way to devastate one of our metropolitan areas.

What we have on the chart here is difficult to see because it is taken off of VHS footage. This is a canister that is very similar. This is a newer company using their best technology trying to compete with the currently used canisters. This is a TOW missile fired down through there, and you can see that it penetrates it or would breach one of these nuclear waste canisters that are going to be shipped across major metropolitan areas in the United States.

Indeed, the most senior al-Qaida leader in U.S. custody told interrogators that al-Qaida is seeking to explode a ''dirty'' bomb in the United States. Jose Padilla was arrested in Chicago after intelligence indicated that he was participating in a plot to detonate a ''dirty'' bomb in the United States. But al-Qaida doesn't need to buy nuclear material to smuggle a ''dirty'' bomb into our country. Congress is doing the hard work for them.

Every truckload of nuclear waste going to Yucca Mountain on our highways through our towns and cities is a potential ''dirty'' bomb. All the terrorists have to do is breach one of these canisters on one of the trucks, trains, or barges, as the Senator from Michigan talked about, in the Great Lakes, and we will witness another severe act of terrorism.

So let's call this legislation what it is and what it is not: This is not the Nuclear Waste Disposal Act. It is the ''terrorism facilitation act,'' and it needs to be defeated. Nuclear powerplant sites are among the most secure commercial facilities in the country. Following the events of September 11, they are being made even more secure, and there are even proposals for military protection at these sites.

Modest infrastructure improvements can further increase the level of protection against any conceivable terrorist threat. Nuclear waste is safe when stored onsite in casks surrounded by concrete. But it is another story when these casks are going to be traveling by homes, schools, and churches. At this time, we cannot be sure they will survive real-world conditions. We may be able to develop the technology, but we don't have it today. So we should not have Yucca Mountain go forward until we develop the technology.

As I have said earlier, the casks have not been tested in real fires—only with computer simulations, and not to the extent they need to be tested. I will repeat that because it is so important.

The computer simulation is for 30 minutes at 1,475 degrees Fahrenheit. The temperature in the Baltimore Tunnel fire read 1,500 degrees, and it burned for days. The NRC stated that it is doing a top-to-bottom review—partly because of September 11 and the Baltimore Tunnel fire—to review the security requirements, including a review of the transportation casks' vulnerabilities to terrorism. Let's make sure these casks are properly tested before Congress votes on Yucca Mountain.

I want to talk about the Government's big lie. Not only is the Government's plan dangerous for America, it also won't solve the problem. The Government's big lie is that we Americans have a choice to have one central nuclear waste storage site at Yucca Mountain or to have waste stored at the reactor sites around America. We talked about it earlier today. That sounds as if it is an easy choice except that it is not true.

Even if, by some luck, waste is shipped safely across the country to Yucca Mountain, there will continue to be nuclear waste stored at all operating reactor sites. You see, even if it were possible to immediately and magically, as one of the Senators talked about today—like our garbage is picked up, we simply, all at once, pick it up and take it to the dump. It is not done that way with nuclear waste. There will continue to be spent fuel stored at each and every operating reactor in the country. That is because nuclear waste is highly radioactive, thermally hot, and must be kept at reactor sites at water-filled cooling ponds for at least 5 to 10 years. The only way spent fuel storage can be eliminated from a reactor location is to shut down the reactor and wait many years to ship the material after that.

I don't think that option of closing down figures into the nuclear industry's long-range plan. We will have 65,000 metric tons of commercial nuclear waste by the time Yucca Mountain is scheduled to open. We produce about 2,000 metric tons of nuclear waste per year. The DOE plans to ship about 3,000 tons. Just do the math. We won't get rid of the nuclear waste backlog in the country for nearly a century—even if, as somebody talked about, we expand Yucca Mountain, which would obviously be politically a very difficult thing to do—excuse me. Yucca Mountain will be filled long before then—as we see on the chart, in 2036.

I think it is important to understand this because the DOE and the Secretary of Energy have been saying that it is safer to have this fuel all shipped to one place. This is today. We have 45,000 tons of spent nuclear high-level radioactive waste around the country. In 2010, when Yucca Mountain is scheduled to open, we will have 65,000 tons. If we start shipping about 3,000 tons a year, by 2036, when Yucca Mountain is full, we will still have virtually the same as what we have today. So we really have not accomplished too much.

If we don't have Yucca Mountain, it will be way up, but there is not a lot of difference. It is a management thing, not a security risk.

The other thing is after Yucca Mountain is full, we start producing more of it, and we get out to 2056, we can see what happens. So Yucca Mountain doesn't really solve the problems people say it is going to solve.

Moving waste to Yucca Mountain will just create one additional large storage facility. To do that, the cost will be tens of thousands of shipments of deadly radioactive waste on the Nation's highways and railroads and waterways day after day, month after month. Obviously, it will never end.

I want to talk briefly about the history of the process. This is really Washington power politics. The reason I talk about this is because we are going to get to the cost of Yucca Mountain in a moment.

In 1982, the Nuclear Waste Policy Act gave the Energy Department until 1998 to open a permanent underground geological depository for high-level nuclear waste. At the time, they were studying several sites. But because of politics out of the States of Nevada, Washington, and Texas—Washington had the majority leader in the House, and Texas had the Speaker of the House—Nevada ended up with the nuclear waste ''queen of spades.''

The deal reached was not by a scientific determination of which location would be suitable. Basically, they just decided on politics that Nevada would get this.

The site originally was for geology. They said: We are going to house this waste underground, and it is going to protect us. Over the years, they found that the geology would not protect us. So what they had to do was build in manmade protections, and that drove the costs up significantly.

Prior to 1987 when they said they were going to study one site, the original cost estimate was $24 billion. In 1985 the cost estimate went to $27 billion, and in 1987 it was $38 billion. They were studying three sites. They said: We cannot do that; we will just study one site.

Now they are studying one site. The cost in 1995 was $37 billion, in 1998 the cost was $46 billion, and in 2001 the cost is $58 billion. That is the equivalent of all 12 aircraft carriers for the United States combined. As a matter of fact, that is more than in today's dollars the cost of the Panama Canal, the World Trade Center, and Hoover Dam all combined.

That does not include building a rail site to Yucca Mountain which, according to the DOE, is going to be needed. So this is a boondoggle, and we do not need to do it.

The PRESIDING OFFICER. The Senator's time has expired.

Mr. ENSIGN. I ask unanimous consent for 5 more minutes.

Mr. MURKOWSKI. On the time of Senator REID.

Mr. ENSIGN. Yes.

Mr. MURKOWSKI. I have no objection, Mr. President.

Mr. ENSIGN. Mr. President, according to the NRC Chairman, people have said: Do we have to do this right now? According to the NRC Chairman, we do have the capacity to store these materials safely for decades to come—NRC Chairman Richard Meserve.

There has been a lot made of one of the Senators talking about what do we do with this waste if we do not transport it, and I wish to conclude my remarks by giving people an answer. If not Yucca Mountain, then what?

Onsite dry cask storage is good for at least 100 years. We know that. These canisters are safe for at least 100 years, according to the Department of Energy. It is about $4 billion to $5 billion to store it onsite, and that includes all of the costs associated with storing it onsite—$4 billion to $5 billion instead of $60 billion plus. It is going to be at least $60 billion, make no mistake about it.

Every year, we have been taking the cost up by over $10 billion in the estimates. Where is the cost going to go from here? We know this situation is going to be too expensive. What we need to do is keep the waste onsite. It is a lot cheaper.

There is promising science. There is pyroprocessing. There is what is called accelerator technology transmutation. These are fancy scientific words. The bottom line is they are modern recycling of nuclear waste or partially spent nuclear fuel rods. We are recycling everything we can in this country. We need to continue to invest in recycling technology.

For those who are supporters of nuclear power, as I am, recycling will make nuclear power more viable in the future, I believe, because if we have solved the waste problem, instead of burying it in the ground where it is too expensive and waste partially spent nuclear fuel rods, if we invest in recycling technology, we will have a permanent energy supply for generation after generation of Americans.

If one believes in nuclear power, let's make it less costly and let's invest in the recycling technology and keep it onsite without the risks of transportation.

I wish to make one other point before I close. The senior Senator from Idaho talked about 1957. We are talking about a procedural motion. He talked about 1957 where somebody offered a motion to proceed, and I have been saying all day we are violating Senate tradition today.

He said that in 1957, somebody in the minority offered a motion to proceed and that debate took a week. At the end of the week, that motion to proceed actually was voted for by a vote of 70-something to 28. While that vote is accurate, what he is inaccurate about is the majority leader supported the vote. What we have said is no motion to proceed has ever come to the Senate floor successfully over the objections of the majority leader, and that statement is still true, even with the 1957 precedent.

We think this still sets a very dangerous precedent on Senate tradition if this vote goes forward today.

Lastly, I wish to thank a few people in our State who have done a phenomenal job of fighting this fight for the people of the State of Nevada and I believe for Americans in general. First, the senior Senator from Nevada, the assistant majority leader. No one has worked more tirelessly on this issue than he has. His staff has done an incredible job, as has my staff. I am thankful for the yeoman work of our Gov. Kenny Guinn and other elected officials, both Republican and Democrat, in our State who have tirelessly fought this issue.

If we lose this vote, I am committed to the belief that one day, years from now, leaders will look back on what the Senate did today and simply say: What were we thinking?

Mr. President, I yield the floor.

The PRESIDING OFFICER. The Senator from Alaska.

Mr. MURKOWSKI. Mr. President, how much time remains on this side?

The PRESIDING OFFICER. The Senator has 26 minutes.

Mr. MURKOWSKI. I will take such time as I need.

Mr. President, it is fair to reflect on where we are. Today the Senate is going to decide whether the Secretary of Energy should be allowed to make an application to the Nuclear Regulatory Commission for the use of Yucca Mountain as a repository for spent nuclear fuel and high-level waste. That is the only issue before this body.

The Senate today is not—I repeat, is not—deciding whether science and engineering are sufficient for the Yucca Mountain site to be operated safely and in compliance with EPA and other agency regulations. That is really the job of the Nuclear Regulatory Commission.

We have had a lot of discussion. Some of the discussion is associated with fear. I have looked for a synonym for red herring. I do not know if fluorescent herring is as close as we are going to get. In any event, we have to deal with this in a responsible manner.

Let me share with my colleagues what some of the public opinionmakers have said. I quote from the New York Times. This is July 9, ''A Critical Vote on Nuclear Waste.'' It says:

Any Senator tempted to vote against the resolution must recognize the severe consequences. A nay vote or a failure to vote means that Yucca Mountain is effectively dead and the nation must start anew to look for a disposal solution. A yes vote means simply that the project can proceed to the next step, a formal licensing application to the Nuclear Regulatory Commission, which will spend years analyzing all aspects of the repository to see if it warrants a license to operate.

Mr. President, I ask unanimous consent that this New York Times article, ''A Critical Vote on Nuclear Waste,'' and a Chicago Tribune article, ''Crossroads of Nuclear Waste Storage,'' dated July 9 both be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From the New York Times, July 9, 2002]

A CRITICAL VOTE ON NUCLEAR WASTE

The Senate is facing a momentous vote this week that will determine whether a plan to bury nuclear waste at Yucca Mountain in Nevada moves to the next stage of regulatory scrutiny or dies prematurely. Any legislative delay now will be likely to terminate the project, and that must not be allowed to happen. If Yucca is abandoned, the nation will be right back where it was decades ago—with spent nuclear fuel piling up at reactor sites around the country and no plan for its permanent disposal.

In recent weeks the critics of Yucca Mountain have grown increasingly alarmist in an effort to stampede any wavering senators. They claim that Yucca has geological and technical flaws that render it unsafe. But those are precisely the issues that will be examined in excruciating detail by the Nuclear Regulatory Commission if a licensing application is allowed to move forward. The critics also fret over the possibility of catastrophic accidents while the fuel transported from reactor sites to Nevada. But they seldom mention that such shipments have gone on without incident in this country and Europe for the past three decades—in quantities that actually exceed the amount that would be shipped to Yucca.

The Senate finds itself in this pivotal spot because the statute that designated Yucca Mountain as the sole candidate for a disposal site set up a tight timetable of necessary approvals. The state of Nevada vetoed the project, as was its right, thereby throwing the decision back to Congress. The House has already voted, by a thumping margin, to go forward. But unless the Senate also votes to override Nevada by late this month, the designation of Yucca as the candidate repository will expire.

Unfortunately, the Senate Democratic leadership is working against the proposal. Harry Reid, the majority whip, who hails from Nevada, is adamantly opposed to storage in his state. Tom Daschle, the majority leader, opposes the project and is refusing to schedule a Yucca Mountain vote. Fortunately, the Nuclear Waste Policy Act allows any senator to request that the Yucca resolution be brought to the floor for time-limited debate and a vote, a step that Republicans say they will take as early as this week, possibly even today.

Any senator tempted to vote against the resolution must recognize the severe consequences. A nay vote or a failure to vote means that Yucca Mountain is effectively dead and the nation must start anew to look for a disposal solution. A yes vote means simply that the project can proceed to the next step, a formal licensing application to the Nuclear Regulatory Commission, which will spend years analyzing all aspects of the repository to see if it warrants a license to operate. Given the stakes, it would be irresponsible for the Senate—most of whose members have little detailed knowledge of the Yucca proposal—to decide this issue on the fly, thereby blocking the detailed technical review that it deserves.

[From the Chicago Tribune, July 9, 2002]

A CROSSROADS IN NUCLEAR WASTE STORAGE

(By Dick Durbin)

The advent of nuclear power more than 50 years ago brought with it both great promise and great responsibility. Our ability to harness the power of the atom has paid substantial dividends for our society, but it has also left us with the formidable challenge of safely storing the byproducts of nuclear power generation. This is a challenge our nation must meet so that future generations are not endangered by today's nuclear waste.

Presently, all of the spent fuel from nuclear power plants and research reactors throughout the country remains on-site at each reactor. None of these facilities was designed to safely store that waste on a permanent basis, and leaving spent fuel in temporary storage around the nation poses both a security threat and an environmental hazard.

Everyone agrees that we need to find a safe and permanent way to store this material and such a storage site has been proposed at Yucca Mountain in Nevada. I have been to Yucca Mountain, which is located 90 miles from Las Vegas on federal land at the remote Nevada nuclear test site. The waste would be stored more than 600 feet underground but more than 500 feet above the water table, sealed in steel containers placed under a titanium shield. A security force at the Nevada test site is in place to protect the area, and the airspace around Yucca Mountain is already restricted.

When this issue has come before Congress in the past, I have opposed efforts to move waste to a temporary facility at Yucca Mountain before there was a scientific determination of whether waste could be safely stored there on a permanent basis. I also opposed earlier measures that would have mandated dangerously low standards for environmental protection at the site.

Recently, however, I have been encouraged by the fact that the Environmental Protection Agency has successfully established radiation and groundwater contamination standards for the Yucca Mountain storage site. These standards were derived from recommendations by experts at the national academy of Sciences and were developed after extensive public comment and scientific analysis. All of these standards greatly exceed the standards debated by Congress in the two previous bills I opposed.

No site will ever be perfect for the storage of high-level nuclear waste. But I believe the studies, which have already been conducted, and the Nuclear Regulatory Commission review still to come provide sufficient assurances that Yucca Mountain is the most appropriate site available and should be used as the permanent national nuclear waste repository. Therefore, I have decided to support the Yucca Mountain resolution, which would make that facility the national nuclear waste repository.

I am still concerned, however, with the movement of thousands of tons of nuclear waste across the country to Nevada. According to the U.S. Department of Energy, Illinois would rank seventh in truck shipments under what is called the ''mostly truck scenario.'' The same Energy Department analysis concludes that Illinois would rank sixth in rail shipments in the ''mostly rail scenario.'' Although waste has been shipped through Illinois and other states in the past, approving Yucca Mountain would initiate the largest waste shipping campaign in the history of our country—both in terms of the number of shipments and the amount of miles traveled for high-level nuclear waste.

Unless we scrutinize safety factors and security risks, the large-scale transportation of radioactive materials has the potential to cause a host of serious challenges to cities and communities along shipping routes. This issue is all the more important in light of the terrorist threats we are likely to face in the years ahead.

In Illinois, nearly half of our electricity is generated from nuclear power. Our state contains seven nuclear power plants, two nuclear research reactors and more commercial nuclear waste than any other state. In addition, we are home to one of the busiest transportation corridors in the nation, putting our state squarely at the intersection of the nuclear crossroads. With the safety of Illinoisans at stake, finding the safest way to move nuclear waste to a location where it poses the least risk is imperative.

Congress must insist on a comprehensive safety program for nuclear waste transportation. We must require the waste containment casks to be tested to ensure they could withstand intense fires, high-speed collisions and other threats that may occur during transport. It is also essential that states be consulted on the selection of transportation routes and are given longer advance notification of waste shipments. Other measures that need to be addressed include banning inland waterway shipments of nuclear waste, requiring dedicated trains and establishing a minimum number of armed escorts to accompany each nuclear waste convoy.

We should move forward with making Yucca Mountain the central repository for our nation's nuclear waste. But we must not forget that the site can only serve its national purpose if the waste is transported safely. Before shipments to Yucca Mountain begin, we need to establish a transportation plan to ensure the safety and security of the communities that lie in the path of those shipments—and we must begin that work today.

Mr. MURKOWSKI. Mr. President, I will refer to a couple of other articles. A Seattle Times editorial, Sunday, June 2:

If the Senate does not follow the House lead, the Energy Department must start over. The agency must look again at other finalists—Deaf Smith County, Texas, or Washington's own Hanford Nuclear Reservation.

I refer to the Oregonian, Saturday, June 8:

If Yucca Mountain is blocked, nuclear waste could sit forever in temporary, poorly planned sites all across this country, including the Trojan nuclear powerplant. Yucca Mountain is clearly the best option available.

From the Washington Post, April 30:

Congress should override Nevada Governor Kenny Guinn's veto and allow work on Yucca Mountain to proceed.

But while years of investigation have not answered all of the questions, neither have they produced adequate reason to stop the project in its tracks.

And April 21, the New York Times:

There is no question that the transportation issues will need to be explored in great depth.

But the appropriate place for those issues to be addressed is in a painstaking regulatory proceeding before the NRC.

Not before a rushed Congress debate.

So everyone understands, we are authorizing the licensing process in the sense that the administration will now be able, if we prevail on this vote, to proceed with a licensing process. That is all.

We had a lot of discussion, and I am inclined to think we have probably spent 20 years or so moving this process along relative to the disposition of the waste. People sometimes have different visions of what Yucca Mountain is all about.

This is a picture of Yucca Mountain. Yucca Mountain has environmental attributes that would contribute to the safe disposal of high-level waste: Remote location with the nearest metropolitan area about 100 miles away, high security because of the proximity to the Nevada Test Site and the Nellis Air Force range, arid climate, deep water table, isolated hydrologic basin without flow into rivers or oceans and multiple natural barriers.

This is Yucca Mountain; this is the site of the tunnel. I have been there. It is in existence. And $4 billion of taxpayers' money has been expended.

It is important to know just what this location involves. This is a picture of the test site area. For the last 40 years, we have been using this area as a test site for nuclear bombs and various nuclear weapons. It is an area that has levels of radioactivity associated with it. For all practical purposes, in spite of the fact we hate to admit we do this, we put certain areas off limits. This is one because of the high levels of radioactivity, unexploded munitions, and so forth. Yucca Mountain is included in this area.

While we have looked for other places, it is fair to say one of the conditions was this area had been set aside for a nuclear test site.

Now, another chart shows tests in other States. As we look at the disposition, we should go back and look at events leading to the selection of Yucca Mountain for a study. There were nine potential sites. There was the Hanford site in Washington and Yucca Mountain in Nevada. In Utah, there was Davis Canyon and Lavender Canyon. In Texas was the Deaf Smith County site and the Swisher site and a couple of sites in Mississippi, sites in Texas. We made a cut. We cut from nine sites and left Hanford, we left Yucca Mountain, Davis Canyon, Texas and Mississippi. Three sites were Presidentially approved: Washington, Nevada, and Texas.

In 1986, there was one site left. It was selected. That was Yucca Mountain. Congress passed the NWPA, as amended, mandating only the Yucca Mountain site for the detailed site characterization.

This has been done. We have expended the money. We went through a process. If we do not take care of Yucca Mountain today, what are we going to do? Start this process all over. It will be Texas, Utah, Washington, Mississippi. We will go through this process—perhaps Vermont. They have a lot of marble stabilization out there. The point is, we would be derelict to walk away from the obligation we have today.

The transportation systems we have heard so much about. This chart shows

the existing transportation routes to WIPP, a low-level isolation pilot plant associated with the Livermore Laboratories and others in New Mexico.

I have been there. It is in the salt caverns. You go down in the huge caverns where they store this low-level waste. It is interesting to see the routing, what States are affected and which are not. We move wastes from various laboratories. These are low-level transuranic wastes that move across Highway No. 80 and so forth. Clearly, they go in one location.

For those arguing the merits of Missouri and waste going through Missouri, the waste leaves Missouri. I am not suggesting there is a final plan associated with it. This is where we have been moving the waste so far. It is low-level waste. We do not know where the various agencies are going to make these decisions and those agencies—the Nuclear Regulatory Commission, the Department of Energy, and the Department of Transportation—will bear the responsibility of determining what routes are taken.

We have moved almost 3,000 shipments of spent fuel. This is high-level waste moved between 1964 and 2000. We moved them over 1.7 million miles. We have had zero radiation releases. Low level to WIPP is 900 shipments, and almost 900,000 miles. We had 3,892 shipments and moved them over 2.6 million miles with zero harmful radiation.

Now the importance of nuclear energy and a source of electricity: 51 percent is coal, natural gas is 16 percent, oil is 2.9 percent, hydro is 7.2 percent, miscellaneous is 2.2, nuclear is 20 percent.

There are those who would like to see the nuclear industry choke on its own waste and simply go away. That is an impractical reality. It does not flow. If we are talking about reducing emissions or talking about global warming, clearly the nuclear industry in this country has to maintain its prominence. We have not had any new nuclear plants come online in 20 years. Clearly, nuclear energy plays a major role. It is emission free. The problem is the problem we have in the Senate today, and that is addressing the disposal of the waste.

It is important to recognize where these plants are located: the State of Washington, California, Texas, and on to the east coast. Clearly, there are a number of nuclear plants producing 20 percent of our electricity. This chart shows the States.

It is important to note the rationale that Congress developed to address the disposal of this waste. That is those that use nuclear power would pay a special assessment into a fund that currently has about $17 billion; $11 billion came from the ratepayer. The Federal Government takes that money and agrees to take the waste. They agreed in a contractual commitment in 1998 to take the waste. They did not take the waste because they were not ready. They are in violation of a contract. The litigation associated with this breach of the contractual commitments is estimated to be somewhere between $40 and $70 billion. That is a hit to the U.S. taxpayer.

The reality is that these ratepayers in Washington paid $98 million; in Arizona, $337 million; in Texas, $334 million; in South Carolina, $876 million; in Pennsylvania, $1 billion; Maine, $67 million. These are fees the ratepayers have paid to the Government to take the waste. We have that obligation. The occupant of the chair is well versed in contractual law. We have an obligation to perform if we enter into a contract. We failed to do that.

The taxpayer bears the burden even though the ratepayers have paid to the Federal Government under the terms of the contract. There you have the responsibility associated with the issue: If this is a Government bailout, will this come to the Appropriations Committee for appropriations? No, the ratepayers have paid this amount.

Let's look at it State by State. Here is New York. New York is 23 percent dependent on nuclear energy; 18 percent coal; gas, 28 percent and so forth.

They have operating reactors, six, and three sites, and as a consequence they have a significant portion of waste in their State. The waste is on the small charts. It is important to reflect on what happens to the waste that is in your State if, indeed, Yucca Mountain does not receive the approval of this body.

We find that there are 2,378 metric tons of nuclear fuel stored in New York. Do you want that fuel moved? That is a question.

The next chart is Connecticut. Connecticut has 45 percent dependence on nuclear energy. Again, the waste stored in that State is 1,500 tons. That is not going to move unless we pass this legislation.

Illinois is almost 50 percent dependent on nuclear energy. They have 5,800 tons of waste, high-level waste. I can go through the other charts:

California, 17 percent dependent; Maryland, 27 percent dependent; Massachusetts, I think 14 percent dependent; New Jersey, 49 percent dependent; and Washington State is relatively insignificant at 8 percent.

Nevertheless, the point I want to make here is that nuclear energy is important, the energy development in these States and the waste is piling up, and it is significant.

Madam President, how much time is remaining on our side?

The PRESIDING OFFICER (Mrs. CLINTON). The Senator has 11 minutes remaining.

Mr. MURKOWSKI. How much time does the Senator from Oklahoma need? I am going to use most of the remaining time, but if he would like 5 minutes? Why don't you take 4 minutes, and you will probably get 5.

Mr. INHOFE. I thank the Senator for giving me a little bit of time. I believe it is necessary.

A number of people have asked me why it is that I support nuclear energy when my home State does not have any nuclear power. My response is that nuclear energy directly benefits every Oklahoman even though not a single kilowatt of energy is produced from nuclear power in our state. Oklahomans benefit from nuclear energy in the form of decreased power bills and increased national and economic security.

Currently, nuclear power represents 20 percent of our Nation's electricity generation. As an integral part of the U.S. energy mix, nuclear energy is a secure energy source that the nation can depend on. Unlike some other energy sources, nuclear energy is not subject to unreliable weather or climate conditions, unpredictable cost fluctuations, or dependence on foreign suppliers.

However, the lack of storage space for nuclear waste is now threatening the existence of nuclear power. If Yucca Mountain is not approved, nuclear powerplants will be forced to start shutting down at some point because there will be no place to store the waste. This would have profound consequences for all Oklahomans.

Even though Oklahoma does not have any nuclear powerplants, if nuclear power goes off line, it would cause an economic crisis in Oklahoma. The reason is simple. If you take 20 percent of the power supply off line, other States' demands of Oklahoma's power would increase, thus creating a smaller supply of energy, and a corresponding increase in the cost of energy for Oklahomans. The days of utility rates in Oklahoma being 19 percent below the national average power rate would be over.

Higher energy prices affect everyone. However, when the price of energy rises that means the less fortunate in our society must make a decision between keeping the heat and lights on or paying for other essential needs. In a recent study on Public Opinion on Poverty, it was reported that one-quarter of Americans report having problems paying for several basic necessities. In this study, currently 23 percent have difficulty in paying their utilities. That is almost one out of every four Americans. I will not support attacks on our energy supply, which hurt the poor in Oklahoma and around the Nation, in the name of an environmental crusade.

In the mid-1980s, I traveled around the country with President Reagan's energy Secretary, Don Hodel, to bring attention to the need for measures to decrease our Nation's energy dependence. Additionally, in January 1998, I elicited virtual consensus from the members of the Joint Chiefs of Staff that energy security was a too-often-overlooked aspect of our national security needs. Additionally, in just the last couple of weeks, Deputy Secretary of Defense Paul Wolfowitz said that U.S. dependency on foreign energy ''is a serious strategic issue . . . My sense

is that (our) dependency is projected to grow, not to decline.''

It is essential for a strong Navy.

The fact is we are at war right now. Every American is benefiting from the war on terrorism. Our subs are nuclear. Our aircraft carriers are nuclear. Every time we send American ships to a different part of the world, whether to keep the peace or defeat an aggressor they head there powered by nuclear fuel. Where does that spent fuel go? Right now the material goes to Idaho. That is right. It is transported right now. It's stored on the surface. So what happens if we fail to set up a permanent repository? We create what Secretary Abraham calls uncertainty regarding the ''continued capability of our naval operations.'' A strong Navy fuels our ability to remain a world power. And we need a safe way to handle what is fueling our Navy.

The cold war is over.

To those of us who grew up in a time when we had bomb shelters in our backyards, nothing would be more welcome than seeing us dismantle weapons we no longer need. Every time I read about the plans for turning plutonium into ''mixed-oxide'' or MOX fuel, I see the results of our past determination to resist Soviet domination.

But whether surplus plutonium is made into MOX fuel or another form, waste is still left over. And it must go to a permanent repository. And that is not just for our own good. How can we urge other countries to get rid of their nuclear weapons if they don't see us doing it? We are now turning swords into plowshares by helping Russia convert its surplus weapons material into fuel for American reactors. Even the by-products of this fuel, once used, will need a repository. Yucca Mountain will provide a safe place for the materials in weapons no longer pointed at our enemies. And it will be a powerful example to other countries that no longer need weapons pointed at us.

Maybe a few years back we could not conceive of terrorists making bombs out of planes and striking at the very heart of America. We can now. Make no mistake. They are out there and in our country. Yes, it is good that we are racing to put neutron flux detectors and gamma ray detectors at all our airports. But terrorists don't need to bring radioactive material into the United States. There is enough of it here.

And these materials—relics of the cold war—are scattered around the country. Yucca Mountain will put this material where it belongs: safe and secure 1,000 feet underground. A few days back, after Jose Padilla, A.K.A. Abdullah al Muhajir, was arrested, I saw this headline in ''The Washington Post: U.S. Source of Isotopes Become Focus After Arrest.'' Here is what the Post said: ''Of the thousands of nuclear sources still in use, or decommissioned to known storage sites, many are thought to be vulnerable to theft or black market sale.'' That is why Yucca Mountain is so important. That is why we have to move now to create a permanent repository. That is why we need a central underground disposal site, where spent fuel can be more safely and efficiently monitored.

And so, I urge my colleagues to vote yes on Yucca Mountain. We caught one terrorist. We can't catch them all. They will come through our airports. They will dock in our major ports. They will go through customs without a hitch because they possess not plutonium, but knowledge. Terrorists want to use that knowledge to threaten our way of life. A vote for Yucca Mountain will make that hard for them.

What is America's record when it comes to transportation of nuclear materials? It is astonishingly safe. There are some people who act as if transporting nuclear fuel will be a new thing for America. The fact is that we've seen more than 3,000 shipments of it over the past 40 years. In all those years, there has been zero danger to the environment, zero release of radioactivity, and zero fatalities.

We have seen 1.7 million miles of these shipments without any release of radioactive contents. And don't forget: The Energy Department also accepts used nuclear fuel from foreign research reactors under a non-proliferation pact. They come in from Europe and Latin America. They are brought by train to South Carolina. And we're going to do that until 2006—22,743 separate used fuel assemblies. This is something we know how to do. Because we have done it. And we have done it exceptionally well.

Will we avoid transporting waste if we don't pass Yucca Mountain? Absolutely not. A lot of sites are reaching their limits for keeping used nuclear fuel on location. 40 of them will need additional storage in the next 8 years. But they don't have the space for it. Where is that waste going to go? Secretary Abraham put his finger on the issue when he testified last February. ''Our real choice is not between transporting or not transporting used fuel, but between transporting it with as much planning and safety as possible, or transporting it with such organization as the moment might invite.''

To keep that waste in 39 States is to keep it at 131 locations never designed for permanent disposal, never intended to manage this waste indefinitely. Clearly, any solution to the disposal of this waste requires it be transported somewhere.

Furthermore, as skillful as America is at transporting hazardous materials, we are not the only people in the world who do that well. Europe has been doing it since 1966 about as much material as we want to send to Yucca Mountain. Fatalities? Hazards from radioactivity? Zero.

There are those who see in this plan the heavy-handed approach of Washington. As a former mayor of Tulsa, I am always very sensitive to the importance of local control. In fact, the way America handles the problem of nuclear waste is a victory for local control. State and local governments can select alternate routes if they oppose those proposed by DOE and 11 States have done just that. As they should. Meanwhile, Federal and State and local authorities have worked together. Worked with training. Worked on contingency plans. Worked on mutual assistance agreements. Worked as partners. As we should. Building on our Nation's fine records, as the ranking member of the Transportation, Infrastructure, and Nuclear Safety Subcommittee, I look forward to working with the various Federal agencies to ensure the proper federal role in providing security for nuclear waste shipments. As a former mayor of Tulsa, I will also keep in mind the critical role that State and local governments must play in this process.

In an attempt to misinform and frighten the public, extreme environmentalists have been saying that the shipment of waste would be creating thousands of ''mobile Chernobyls.'' I have already discussed, our Nation's safety record with regard to the shipment of nuclear materials. However, I must mention that, until the Yucca Mountain project is licensed by the Nuclear Regulatory Commission, which is about 10 years off, the Departments of Energy and Transportation will not designate shipping routes for nuclear waste to Yucca Mountain. If anyone implies that they know the routes, they are not telling the truth because the decision makers of those routes will not consider routes for many years.

As ranking member of the Transportation, Infrastructure, and Nuclear Safety Subcommittee, I am looking forward to my key role in working with the various federal agencies to ensure the safe transportation of our commercial and military nuclear waste.

Make no mistake. A vote against Yucca Mountain is a vote against nuclear power, and, thus, a vote to hurt our energy, economic, and national security.

I thank the Senator from Alaska for giving me a few minutes.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Madam President, I ask unanimous consent there be 10 minutes additional time equally divided between Senator MURKOWSKI and the Senator from Nevada.

The PRESIDING OFFICER. Without objection, it is so ordered.

Who yields time?

Mr. MURKOWSKI. Madam President, I believe we have a Senator from the majority coming over. But I will take—how much time may I ask is remaining on our side, Madam President?

The PRESIDING OFFICER. There remains 11½ minutes.

Mr. MURKOWSKI. I would like to take 10 minutes and reserve the remainder of my time.

As I indicated a few moments ago, there is only one issue before the Senate, and that is the reality that we are about to vote to determine whether science and engineering are sufficient for the Yucca Mountain site to be operated safely in compliance with EPA and other agency regulations in pursuing a license by the Department of Energy. That is the question.

The ultimate transportation and other matters are going to be determined by the Nuclear Regulatory Commission, which is a very competent group. But the Senate is not now deciding whether or how spent fuel will be transported to a site if it is licensed and constructed.

As I indicated, the Department of Transportation, the Secretary of Energy, the Nuclear Regulatory Commission, will proceed and that will take some time.

What we have today is basically two choices: We could follow the recommendations of the Secretary of Energy and the President of the United States—the U.S. House of Representatives has done its job, and the Senate Committee on Energy and Natural Resources—and allow the Secretary of Energy to proceed and apply for a license or we can abandon some 20 years of work, over $7 billion invested in science, in engineering, and the peer-reviewed conclusions of responsible scientists within and outside Government, and then what do we do? We begin the task all over at the expense of the taxpayers.

That is where we are. There is no middle ground and no way to duck the issue or duck the responsibility. As we say in Alaska, it is time to fish or cut bait.

The Nuclear Waste Policy Act was deliberately and carefully crafted to ensure that both the Senate and the House would deal with the issue.

The House met its obligation by an overwhelming vote of 306 to 117. The House agreed with the President's decision and voted to allow the Secretary of Energy to proceed with the license application. The Committee on Energy and Natural Resources held 3 full days of hearings to examine all aspects of this issue, including a full day where we welcomed the State of Nevada to select its witnesses who would appear in opposition to the resolution. The committee carefully reviewed each and every argument raised by the State of Nevada, either in the Governor's message or by the State representatives.

I commend the report to the attention of my colleagues. We have that report before us. Here it is. In a careful and methodical manner, this particular report discusses each and every argument raised in the process.

Under any impartial analysis, there is no legitimate reason to object to the President's decision to deny the Secretary the opportunity to apply for a license before the Nuclear Regulatory Commission.

What are the consequences if we fail to act? On the other hand, there are many serious consequences if we do not approve the resolution. The immediate consequence is set forth in the Nuclear Waste Policy Act. Section 115(b) is explicit. If the resolution is not approved within 90 days—the 90-day period for congressional review—such site shall be disapproved. The magic date is July 27. If this is not approved by that date, the site shall be disapproved.

Further, it does not say that the decision is postponed or the decision is simply put off for some reason to be revisited at a more convenient time. It explicitly and without qualification says ''such site shall be disapproved.''

There are the consequences of that disapproval, and those consequences are serious. At a minimum, Congress will need to reconsider the previous sites—Hanford in Washington, Deaf Smith County, TX—giving serious consideration by using the Hanford Reservation as an interim site to meet our contractual obligations to the utilities and deal with defense in other ways.

We have a significant amount of defense waste already at Hanford. Instead of moving material from Hanford, we might have to consider moving additional material there for the foreseeable future.

Should Congress not act and we start this process over, my guess is we will have to go back to where we were in 1982 when there was serious consideration of granite formations in the Michigan Peninsula, and elsewhere; salt caverns in Mississippi and Louisiana; granite in Vermont, and so forth. Some have suggested that we use Federal reservations as interim sites, as has been proposed in the past. With the transportation scenario, that will be far more complex than that which has been considered to date—perhaps simply leaving the spent fuel onsite in Vermont, Illinois, Maryland, California, or elsewhere.

Let there be no mistake. Because of the statutory time constraints and the directives in the law, a vote against the motion to proceed is a vote to direct the Secretary of Energy to cease all further work at Yucca Mountain and close the office until Congress decides otherwise.

I hope my colleagues will look around in the Chamber because only Nevada—only Nevada—will not be in the next round.

There is an implication to the taxpayer because we have the nuclear waste. Aside from taking Nevada off the table, there are other unavoidable and unpleasant consequences of failure to face up to our responsibilities. Members may not recall, but the cost of permanent storage of spent fuel is totally financed by ratepayers who use the energy. The fee is collected by the utilities and every one of our constituents who have nuclear energy as part of their energy mix have been paying into the nuclear waste to pay for storage. These costs do not—let me repeat—do not come out of the General Treasury. They come from ratepayers that use nuclear energy. These ratepayers are in virtually every State in the Union, including States that do not have nuclear powerplants. Those ratepayers and the States that either have nuclear powerplants or whose citizens pay for the use of nuclear power have a contractual obligation to set in statute with the Federal Government to take spent fuel from their sites.

The last administration thought they could avoid the problem and suggested there was no binding requirement. The courts thought otherwise.

If you like the idea of coming up with $60 billion or $70 billion or $80 billion of taxpayer money—that is taxpayer, not ratepayer money—then vote against the motion to proceed. The $60 billion to $80 billion would likely not be the end of the toll for the taxpayer either because, as a matter of national interest, we will need to find the solution, and the States will incur expenses as well as those associated with liability. Leaving the waste is a consideration, but it is a bad idea.

In addition to economic issues, there is the health and safety issues associated with continuing to leave both spent fuel and high-level waste onsite. Remember, the current site-storage for the reactors is and was designed to be temporary. Yes, the present storage is the safest, but it is not a permanent solution. It is an interim solution.

The Chairman of the NRC has been very up front, saying that the present arrangement for the temporary storage of spent fuel at commercial reactors is safe, and it is, as he states, a ''temporary'' measure.

Exchanging Yucca Mountain for 131 sites in 39 States and permanent repositories scattered around the country is not something the Chairman recommends nor that any other thoughtful person suggested. But that is precisely what those who oppose the motion to proceed are endorsing. There can be no other conclusion.

We also have the situation of utilities running out of room for storage and needing to find an alternative site if Yucca Mountain does not go forward. If a repository is not built, these utilities need to be shut down. In shutting down the reactors, we are going to have to look to alternative sources of fuel. What are they? Coal? Oil? Nuclear is clean power.

As we address our concerns over emissions and the recognition that nuclear provides about 20 percent of the electric power generated in this country, it makes a significant addition in our energy mix. Do any of the opponents to the motion to proceed have a suggestion on how we are going to replace that 20 percent? I guess the answer is more fossil fuels.

There is no way that this Nation will ever approve the Kyoto targets on climate change without nuclear power. There is no way to replace nuclear energy within our electric power mix.

For those of you who experienced shortages on the west coast last year,

think where this Nation would be and what we would be in for if we had to shut off 20 percent of our electric power simply because we could not agree on a solution to the waste problem.

If you don't know how much of the electric power in your State comes from nuclear, I have gone through the numbers: Connecticut, 40 percent; Illinois, 50 percent; California, 17 percent; Vermont, 67 percent; New York, 23 percent; Maryland, 28 percent; Michigan, 18 percent; and, Georgia, 27 percent. How much waste is in those States that needs to get out? It is thousands and thousands of metric tons.

The PRESIDING OFFICER. The Senator has used 10 minutes.

Mr. MURKOWSKI. I believe I have 1 minute. I will conclude. I see the majority leader is seeking recognition. I want to respect the traditions of the Senate.

I will conclude with the reality that the issue before us is clear. All one has to do is read the commission report. The Committee on Energy and Natural Resources performed the review, as we would expect. We carefully considered every objection raised by the State of Nevada. We conducted 3 days of hearings. We considered the issue in an open business meeting and favorably reported on a bipartisan basis. We filed a comprehensive report that discusses every argument raised by the State of Nevada, and why the argument is not persuasive or not relevant to the issue before the Senate.

I commend my colleagues, Senator ENSIGN and Senator REID. I understand why the Senators from Nevada oppose the resolution, but I cannot understand why anyone else would.

Thank you, Madam President. I yield the floor.

The PRESIDING OFFICER. The majority leader.

Mr. DASCHLE. Madam President, I will use my leader time to make the statement I am about to make.

The PRESIDING OFFICER. The majority leader is recognized.

Mr. DASCHLE. Madam President, we should not be having this vote today. There are still far too many questions about the wisdom and safety of creating a national nuclear waste dump at Yucca Mountain for anyone to be able to cast an informed, responsible vote on this matter. But we are here.

We are here because the Bush administration and some of its allies in Congress—and in the energy industry—are determined to exploit unique rules that were written 20 years ago and apply only to this bill.

I can't help but think how ironic it is that less than a week after America celebrated the genius of our Founders, who intended this Senate to be the world's most deliberative body, we are being forced to vote on a matter of such grave importance before we can have an informed, honest debate.

Even more troubling than the break this vote represents with our past, is the threat it poses to America's future. Let us be very clear: The claim that science supports building a national nuclear waste dump at Yucca Mountain is simply not true. The truth is, leading independent scientists have raised troubling questions about the scientific basis for the Department of Energy's recommendation regarding Yucca Mountain.

A recent letter to Congress from the independent Nuclear Waste Technical Review Board contains a warning we should all pay great heed to. It warns that—quote—''the technical basis for DOE's repository design is weak to moderate at this time.''

Think about that. We are being asked to overturn a Governor's veto—and risk public health and safety—by approving a plan of ''weak to moderate'' technical design. That is an extraordinary position for the administration to take.

The General Accounting Office, Congress's independent watchdog agency, has also raised serious questions about Yucca Mountain. Eight months ago, the GAO released a report that questioned Secretary Abraham's recommendation to the President to move ahead on Yucca Mountain despite the—quote—''significant amount of work remaining to be done'' on the safety and feasibility of the project. The GAO report noted that more than 200 unresolved technical issues identified by the Nuclear Regulatory Commission remain unanswered. It pointed out that even the Department of Energy's own contractor doesn't think those issues will be resolved in time to meet the 2010 deadline. In fact, it will probably be years before we know definitively whether it is safe to store nuclear waste at Yucca Mountain.

So why are we having this vote today?

We are being forced to decide this issue prematurely—without sufficient scientific information—because this administration is doing the bidding of special interests that simply want to make the deadly waste they have generated somebody else's problem.

That is wrong. We ought to make this decision on the basis of sound science, not pressure from the energy industry.

Two weeks ago, a mild earthquake shook Yucca Mountain. What would happen to nuclear waste buried beneath Yucca Mountain when the next earthquake hits? And we know there will be another. Will the radioactive waste leak? Will it contaminate the soil? The groundwater? We don't know.

The decision we make will have consequences that will last for tens of thousands of years. We owe it to the American people—and to future generations of Americans who haven't been born yet—to wait until we have real answers. Yucca Mountain is less than 75 miles from Las Vegas, the fastest-growing metro area in the country.

But it is not just Nevadans who are potentially in harm's way. Serious questions have also been raised not only about the safety of burying nuclear waste at Yucca Mountain, but also about the safety of getting the toxic materials to Yucca Mountain.

We are talking about transporting roughly 70,000 metric tons of deadly waste from nuclear facilities in 39 States across our Nation's highways, railways, and waterways to Yucca Mountain. No one knows exactly what routes the waste would take. But, based on the routes the DOE used in its environmental impact statement, there are 14,500 schools and 38 million people within 1 mile of a proposed nuclear waste transfer route.

This is extremely dangerous material: High-level radioactive waste. According to the non-partisan Environmental Working Group: Each rail cask carrying nuclear waste, for instance, contains 240 times as much long-lived radiation as was released by the Hiroshima bomb. A person standing 3 feet from an unshielded nuclear waste cask will receive a lethal dose of radiation in 2 minutes.

The administration has warned us repeatedly that terrorists may hijack trucks and strike at trains. We also know that there are security problems with many of our ports. By shipping nuclear waste on trucks and trains and barges, we may very well be creating hundreds, even thousands, of rolling ''dirty'' bombs. What sense does that make?

Even if we are fortunate enough to avoid terrorist attacks on shipments of radioactive waste bound for Yucca Mountain, there is a serious risk of accidents in transit, which would put Americans at risk of exposure to high-level radioactive waste as well. Almost a year ago exactly, a train derailment in a Maryland incident caused a tunnel fire that burned for days. Temperatures in that tunnel exceeded 1,000 degrees.

How much radiation would have been released to the environment had nuclear waste been on that train? How many people might have died?

There is so much we don't know about this ill-conceived project. But there is one thing we do know: Contrary to what the special interests claim, even if the Senate votes today to override Governor Guinn's veto, creating a national nuclear dump in Nevada will not solve America's nuclear waste storage problem. That is because the site isn't big enough. America produces far more nuclear waste than can be buried at Yucca Mountain. So beware if you are thinking of voting for this proposal. This time, the nuclear waste may be passing through your State. Next time, your State may be where the special interests want to bury their radioactive trash.

If we let them do it this time—without sufficient scientific proof that it is safe—think how much easier it will be the next time.

During his campaign, President Bush promised Americans that if he were elected, he would support regulations

requiring energy companies to reduce their emissions of carbon dioxide, a compound that nearly all scientists agree is causing global warming. When the time came to follow through on that promise, the President reneged.

At a stop in Las Vegas during the campaign, Vice President CHENEY said a Bush administration would not muscle this project through. He promised that the final decision would be based on sound science. Now, at the urging of the energy industry, the administration has reneged on that promise, too. They are pushing us to make this decision prematurely, at grave potential risk to this Nation.

There is no reason we have to make a final decision today. Scientists at the Nuclear Regulatory Commission have assured us that the nuclear waste can stay where is it for 100 years—safe in dry cask storage—without posing any additional risk to public health and safety. It is premature, dangerous, and reckless to force a vote on this question today. We have more than enough time to make an informed, responsible decision about Yucca Mountain. The question is: Will we have the courage to take that time?

For the sake of all Americans—including those who will be born generations from now—I hope the answer is yes.

I urge my colleagues to vote against this proposal. We risk no harm by waiting for the scientists to finish their work. We risk catastrophic harm by refusing to wait.

I yield the floor.

The PRESIDING OFFICER. The Republican leader.

Mr. LOTT. Madam President, parliamentary inquiry: How much time remains on each side at this point?

The PRESIDING OFFICER. The Senator from Alaska has no time remaining. The Senator from Nevada has 27½ minutes remaining.

Mr. LOTT. Madam President, I will use my leader time. I realize Senators are expecting to vote on or around 6 o'clock. I hope we will be able to do that.

In that vein, I will not speak too long, but I have to rise to urge my colleagues to vote yes on the motion to proceed. That is the vote. That will be the only vote today. This is not something that is new. This is not a proposal that we are rushing into. In fact, the entire time I have been in the Senate, and 6 years when I was in the House, this process has been under way. It is 20 years that this has been in the making. Nobody is being surprised. Nobody is being rammed. There are not going to be any dangers.

This is a part of a very long, thoughtful process based on science. Twenty years and $8 billion have already been expended. This is something we must do. Nuclear power is an important part of our overall energy needs. It provides clean, efficient power. We need to include that in our diverse package of power production.

I am still dumbfounded to hear people express concerns about how it can be moved, how it can be stored. Senator MURKOWSKI and a bipartisan delegation took a look 10 years ago at how Sweden, France, and the Japanese have dealt with this problem. Yet in America we have not been able to come to grips with our future needs and how we are going to deal with the problem.

We should not overexaggerate what this decision today will do. The Senate today will decide very simply whether to permit the Secretary of Energy to apply for a license to operate a repository at Yucca Mountain. It is not the end of the process. It is the very beginning. I know from experience we are going to look at this issue every year, congressionally, as we should, because funds will have to be used as we go through the process. Senators from across the country are going to want to know what is happening, how it is going. This is just to begin the important part of the process.

We should not abandon all these years of effort. That is what would happen. If we don't pass this motion to proceed, vote yes on it, I don't know how we go forward. We will have wasted years and billions of dollars in research and effort.

In addition, there is a tremendous problem with the exposure the Government would have as a result. If we don't go forward, our Federal Government could face billions of dollars in liability for breach of contractual obligations. Remember this: If we don't proceed, a lot of companies are going to start entering into private contracts. They will start making arrangements for other types of repositories, probably not as safe, not as well thought out, not based on as much science, and also still having to be moved. When you look at various States and where their nuclear waste is and its condition, you see that something is going to happen. Having a repository that we have studied so much and that will be so secure is better than the alternative of the liability to which we would be exposed and what then would begin to happen all over the country.

We should not jeopardize our only realistic means of meeting global climate concerns by cutting back 20 percent of clean electric power that is supplied by these nuclear reactors. As a matter of fact, I am hoping we will have some more nuclear reactors activated in the Tennessee Valley Authority region.

Clearly, there is a way that could be done, and there are some nearly completed reactors that could be put back on line. It would help us with our energy needs as we move toward an ever growing economy. If you are going to have economic growth, you have to have power. I have just visited some other countries that have seen real growth, and one of the concerns they have—a country such as Ireland—is that growth. They have new companies, but they are struggling to keep up with meeting the power needs that go with the economic growth.

If we don't proceed, do we go back to the beginning? Do we debate again the repository siting and reexamine all the feasibilities of other sites such as the Hanford Reservation or the Michigan Peninsula. Where would it be? What would we do?

Also, we would have to consider existing Federal reservations such as Hanford and Savannah River. The complications that would be caused and the irresponsible consequences of not agreeing to the motion to proceed today are almost incomprehensible.

There has been a lot of discussion about transportation, moving this waste around the country. How can we deal with it? Certainly, getting this waste moved to a single repository where we could have very strong security is much better than what we have now with all of these sites in 39 States that are sitting there reaching their limits and exposed. It would be much easier certainly to guarantee the security in a single place.

I have also taken the time to look at how this transportation is handled. These moving devices are very secure. You wouldn't believe all the effort that goes into making sure they won't be exposed to any kind of accident. To my knowledge, there has never been one that has caused a problem.

When you look at what we have done to paint this dire picture of what might happen, the truth is, the picture of what will happen if we don't take this action now, after all this time, all this money, all this effort, all this science—I don't know where we go from here. It all boils down to this vote for 39 States, including my State. If not now, when in the world are we going to do it? And if not in this way, if not in this place, where? There are a lot of Senators who would have to begin to be very nervous about a whole reevaluation process and what it would mean to their sites.

I understand the Senators from Nevada. They have made a valiant effort. They feel so strongly about it. I understand that. But I think the Senate is committed to working with them to make sure that as we move forward, it is based on good science and also that we do it in the most secure fashion.

Let me again urge that we vote yes and that we do it within the next few minutes.

I yield the floor.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Madam President, the Senator from Nevada talked about courage. I yield 5 minutes to one of the most courageous legislators we have had. She showed that courage in the House of Representatives and now in the Senate.

The PRESIDING OFFICER. The Senator from Washington.

Ms. CANTWELL. Madam President, I rise today in opposition to the motion

to proceed to the Yucca Mountain resolution authorizing DOE to move forward with the siting of a national nuclear waste repository at Yucca Mountain, Nevada.

Washington State is home to the Hanford Nuclear Reservation, the most contaminated site in this country. My constituents have a very keen interest in the development of a comprehensive, scientifically-driven national nuclear waste policy. Unfortunately, I don't believe this proposal, the Yucca Mountain policy, represents the needs of Washington State. As far as I can tell, it is neither a comprehensive solution to the fact that we have 54 million gallons of tank waste now stored at Hanford, nor was the decision to recommend the site at Yucca Mountain driven by a preponderance of scientific evidence.

This proposal, as billed, is supposed to be a long-term, comprehensive solution for our nation's nuclear waste, yet it would leave as much as 87 percent of the high-level nuclear tank waste in my State. That is right. Under the Department of Energy's plan, as outlined in its Environmental Impact Statement, only 13 percent of the waste from Washington State's underground tanks would move to Yucca Mountain. Only 19 percent of all of Hanford's defense-related waste would move. And that's to say nothing about the increase in the total amount of commercial nuclear waste within our borders.

There are capacity issues, as is admitted in the EIS. Yucca Mountain will, by statute, only be able to take up to 70,000 metric tons of heavy metal. And by the time the Yucca Mountain proposed site is open, Washington State will already have 150-percent more commercial nuclear waste than we have today. So where is the waste in Washington State going to go?

The Seattle PI recently ran an editorial, ''Yucca Mountain Must Meet Rigorous Standards,'' that talked about how we had created a monster in the amount of nuclear waste in this country and asked what we are going to do about it. I ask unanimous consent to print that in the RECORD.

There being no objection, the editorial ordered to be printed in the RECORD, as follows:

[From the Seattle Post-Intelligencer, July 8, 2002]

YUCCA MOUNTAIN MUST MEET RIGOROUS STANDARDS

This country, in this century, has created a monster that likely will live for hundreds of thousands of years. Long, long after we are gone, Americans will look back at the summer of 2002 to see how carefully we tamed the monster.

So imagine the pressure on the U.S. Senate this week as it must decide whether to declare Yucca Mountain in Nevada the permanent repository for this nation's most dangerous nuclear waste.

Maybe Yucca Mountain should become the final resting place for this radioactive Frankenstein. But Americans, and especially citizens of Washington state, should be very sure that the site meets the highest standards for effectiveness and safety before it is officially designated.

Washington state's Hanford Nuclear Reservation, remember, was very close to being chosen for this ugliest of graveyards. We didn't want it any more than the citizens of Nevada do.

Washington state has done its share for the country in producing and enduring these dangerous wastes and waiting for bureaucrats and politicians to recognize the environmental threat with which we've been saddled.

Washington was able to escape doing even more to rid the world of the nuclear-waste monster.

So this state cannt be party to sacrificing the health of Nevada and its residents because we want to get rid of the wastes piled up within our borders.

We owe Nevada—even more, probably, than other states do.

Washington doesn't necessarily need to join Nevada in opposing the respository. But we and our congressional delegation should be involved. We should insist that the Department of Energy, the Environmental Protection Agency and the Nuclear Regulatory Commission make certain that this repository is as safe as we would want it to be if the waste were coming to Hanford.

The repository is supposed to separate high-level nuclear waste from the human race for 10 centuries.

We've spent $7 billion studying Yucca Mountain, and for several years, it's been the only place under consideration. This has put a lot of heat on the EPA, DOE and the NCR to lower or change standards to make sure the Nevada site makes the grade.

That just adds to the need for the Senate to be cautious about signing on to this plan. It can't be Yucca Mountain for the sake of getting something—anything—done about nuclear waste. Expedient is not good enough when the decision will have consequences for thousands and thousands of years.

There can be no certainty when the timeline is unimaginably long and the material unimaginably ugly.

Ms. CANTWELL. So why doesn't the ''trust us'' answer work for us when it comes to nuclear waste—when it comes to trusting the Department of Energy? Washington State has had to fight and battle hard. By some estimates, we have already spent some $35 billion on Hanford cleanup—without producing a single log of vitrified waste from those underground tanks that are leaking in my State. We will also spend another $50 billion, according to estimates, to finish the job, and we are banking on the development of new technologies that have never been used in projects of this magnitude. Meanwhile, we are spending an average of about $5.1 million per day on this effort.

Since starting this project, we have had lots of stops and starts. In 1958, we tried converting our nuclear tank waste to ceramic forms. We tried again later in the 1980s, to turn the tank waste into grout. That plan didn't work, and it was abandoned.

Then, in 1998, DOE tried to privatize the construction of the vitrification plant. That didn't work either. After a series of cost overruns, DOE fired the contractor and we moved on to the next phase.

So we in Washington State know how hard this process can be. That is why we have a tri-party agreement with the Federal Government and our State agencies to make sure the Department of Energy lives up to its responsibilities. But these are complex problems. So the fact that DOE hasn't answered all the questions about Yucca Mountain on the technical side and on the environmental side before proceeding puts a question in my mind: Why do we have to execute today? Why do we have to move forward today?

Even the GAO, in its recent report, says that there was no way that the questions left to be answered at Yucca can be answered in the timeframe that the original Nuclear Waste Policy Act envisioned So, basically, we are saying we will approve this site without conclusively addressing some 293, I believe, different technical questions that are still out there.

As the GAO stated in its December 2001 report:

On the basis of information we reviewed, DOE will not be able to submit an acceptable application to the NRC within the express statutory time frames . . .

The GAO also criticized the lack of reliable cost estimates for Yucca Mountain. How much will American taxpayers spend on this proposal, with so many outstanding technical uncertainties? No one really knows, but likely over $100 billion. That's why this proposal is opposed by so many taxpayer groups.

Madam President, my State, more than any, wants a real solution to our nation's nuclear waste problem. But more than anywhere else, my State also knows that that these solutions must be based on sound science and technology, and that the people deserve real answers and not a plan that will do little to nothing for moving waste out of our State. So when the DOE leaves so many questions unanswered and rushes to judgment, I am skeptical.

To quote another article in the Seattle Post-Intelligencer, ''Cart before horse at Yucca,'' it said:

Been there, heard those empty promises about sure-bet technological fixes for the past 50 years. That approach hasn't produced a disposal solution so far, and there's no reason to rely on that failed strategy now.

We need more specific answers on every aspect of the Yucca Mountain plan—on transportation, technology, and most importantly, from the State of Washington: Where is the rest of the 87 percent of our tank waste going to go? The Yucca Mountain proposal fails to provide that answer.

I yield the floor.

The PRESIDING OFFICER. The Senator from Nevada is recognized.

Mr. REID. I yield 1 minute to the Senator from Missouri, Senator CARNAHAN.

The PRESIDING OFFICER. Senator from Missouri is recognized.

Mrs. CARNAHAN. Madam President, for the RECORD, I want to correct the statement made earlier regarding the shipment of nuclear waste or spent fuel through Missouri.

The Senator from Alaska stated that ''there is no proposed existing transportation route that will be taking the

waste through Missouri.'' He also said that ''there is no logic to suggest that there would be movement of waste through the State of Missouri.'' These are simply untrue statements.

In fact, a shipment of foreign research reactor spent fuel was shipped through Missouri on I–70 in June 2001. The Department of Energy has three highway routes selected for cross-country shipments of this spent fuel that we take back from foreign countries.

I have the map right here. I got it from the Department of Energy. Two of the three routes go directly across Missouri. This map—not the one used on the floor by the Senator from Alaska—is a much better predictor for the potential routes for the spent fuel that will be shipped cross-country to Yucca Mountain because it is currently used for very similar nuclear waste.

These are the facts. I wanted the RECORD to be clear for the people of Missouri.

Mr. REID. Mr. President, how much time does the Senator from Nevada have remaining?

The PRESIDING OFFICER. Twenty minutes.

Mr. REID. Madam President, I know there are people in the audience all around here who are being paid lots of money. They are coming here to see what is going to happen. They are being paid lots of money. They drive here in limousines and have Gucci shoes and nice suits. It is interesting to know that in the places where they work, Washington and New York, they have editorials supporting this bad situation, trying to ship Yucca Mountain waste on our highways, railways, and our waterways.

In this morning's paper, it says the Senate should pass the Yucca Mountain bill now. This is part of the unending stream of money. That is what this is all about—money, lots of money; money to run newspaper ads; unlimited vacations to Las Vegas to look at Yucca Mountain for 2 hours and spend three days being wined and dined in Las Vegas; unlimited dollars to send representatives to Capitol Hill.

I know how this works. The State of Nevada had a few dollars and we wanted to hire a lobbyist, but we could not find one. They were all hired by the Nuclear Energy Institute. We could not hire them. They had conflicts of interest. So all you people here, just bill everybody, feel good about it; you are perpetrating a travesty on the people of this country.

We know that the information in this ad from the Washington Post are myths. The law requires Senate action. That is not true, as has been indicated by the majority leader and everybody else. It is not true. The chairman of the Nuclear Regulatory Commission said less than a month ago that if it didn't go forward now, no big deal, it is safe where it is.

Well, this argument that Yucca needs to happen is a big crock of potato soup. The fact of the matter is that the General Accounting Office said there is 292 scientific investigative reports that are not completed.

Those independent scientists and analysts include the Nuclear Waste Technical Review Board, General Accounting Office, a former NRC commissioner, and other independent scientists.

Let's look at some of the myths of this ad:

It is right for the environment.

Now, that is a joke. It is right for the environment? Every environmental group in America opposes Yucca Mountain. There's your answer. The transportation of it scares them. The Senator from Oklahoma came and said ''why are they scaring people?'' Let's think about this a minute. The proposed route that goes through Oklahoma was just the scene of a horrible accident, where a barge hit a bridge and 23 cars were knocked into the water and it killed 13 people.

I don't think that is scaring people. I think it is a scary fact. So it is good for the environment? That has to be a big laugh. Every environmental group in America opposes this. ''It has bipartisan support''? The PTA, the national Parent Teachers Association, opposes this. The National Education Association and the Farm Bureau, because of the water situation, oppose this, along with the U.S. Conference of Mayors. As is already in the RECORD from the Senator from California, hundreds of environmental groups and other organizations in America oppose this.

It is right for the environment? Afraid not. ''It is right for consumers''? Joan Claybrook, who spent hours out in the reception room earlier today, is the epitome of what consumers are about in America, and her group opposes it.

Right for consumers? If this boondoggle goes through, it will cost the American taxpayers approximately $100 billion. The Department of Energy itself acknowledges they will spend $69 billion, but they low-ball everything and come back to Congress for more money. How can that be right for hard-working American families.

''It is time for action''? Afraid not. But this is the Gucci crowd. They paid for this. They do it in New York and in Washington where they get the good editorials. They don't get the good editorials in other places because they have not been able to weave their web of money.

That is what this is all about. As the Senator from California indicated today, 261 groups make up the Nuclear Energy Institute. These are the same groups that our Vice President met with secretly. Now he won't tell us anything about those meetings.

Let's see what USA Today said. They said there is no good reason to move forward with this project. The view is best summarized by comments of the Chairman of the Nuclear Regulatory Commission where he said:

> If Yucca Mountain was to fail because of congressional action, it does not mean from a policy point of view the country is at a stalemate and confronting imminent disaster. We do have the capacity to store the material safely for decades.
>
> There has been talk today on several occasions that these sites are filling up; as a result, we are going to have to move to unregulated private storage facilities. That's another lie, because these private facilities still have to be approved by the Nuclear Regulatory Commission.

I repeat, outside of Washington and New York, people realize how flawed this is. It certainly is the wrong way to go.

The Department of Energy has been saying we need to have Yucca Mountain to consolidate all the waste that is sitting in existing nuclear facilities. If there were ever a big lie, that is it. I have had Senators who support this come here all day today saying: What we need is one site. That is what this is all about. Every State one looks at, we will find they do not gain anything. None of them are getting rid of nuclear waste.

We can run through all these places across America. When it is all over, Browns Ferry in Alabama will have 107 percent of the nuclear waste they have right now, and we can go on down the list; 168 percent in Pennsylvania; 140 percent in South Carolina. There is one that is 306 percent. That is in Virginia. There is one here for 380 percent. They will have 380 percent more nuclear waste than when they started.

This is the big lie, that they are going to get rid of the nuclear waste all around the country and have one place where there is nuclear waste. That is simply not true. It will not happen. They are going to wind up with more nuclear waste.

A simple statement of fact: They can move at the most 3,000 tons a year. They will generate more than 2,000 tons a year, and they have 46,000 tons stored, and Yucca can only hold 77,000 tons. It does not take a mathematician to figure out that we are not going to get rid of the nuclear waste stored where it is.

Some of my colleagues have said the Nuclear Waste Technical Review Board really has not said how bad this is. They have said it as clearly as one can. An important conclusion in the board's January letter is:

> When DOE's technical and scientific work is taken as a whole the Board's view is that the technical basis for the DOE's repository performance is weak to moderate. . . .

They go on to say:

> While no individual technical or scientific factor has been identified that would automatically eliminate Yucca Mountain from consideration at this point, the Board has limited confidence generated by DOE's performance market.

We are in the midst of a crisis in this country. The stock market has plummeted. People have lost confidence in corporate America. Today, we should be working to fix those problems, not create another disaster for the American people to help out big corporations. That is what this is about. Corporate America is driving this decision.

That is really too bad, Madam President. It is really too bad.

I extend my appreciation publicly to my friend from Nevada. Senator ENSIGN has worked very hard on this. He has done good work. Senator ENSIGN has done an outstanding job talking with every member of the minority. I am very happy with the work he has done. I publicly congratulate him for the work he has done.

I have been tremendously impressed with the fact he has not in any way backed off, even though some say it is unpopular for him to oppose the President of the United States.

Let me read a poem by Robert Frost to close this debate:

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveller, long I stood
And looked down one as far as I could
To where it bend in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I—
I took the one less travelled by,
And that has made all the difference.

Madam President, Senators are being called upon to take that less traveled road because it is going to make a difference.

Yucca Mountain is a bad project. We cannot transport nuclear waste safely. We know that. Nuclear waste is subject to terrorist attack. We are talking about tens of thousands of truckloads and thousands and thousands of trainloads, and now they told us they are going to move waste on barges. This is a road that should not be traveled, even though some people want to go down that road.

I say let's take the road that makes all the difference. It is the right thing to do.

In the years to come, as indicated in the Seattle Post Intelligencer, people are going to ask: Why did they do that? There is no reason to do it. Chairman Meserve has said:

If Yucca Mountain were to fail because of congressional action, that does not mean all of a sudden from a policy point of view that the country is at a stalemate and is confronting imminent disaster.

That is true. But corporate interests are pushing this. In fact, we should be talking about legislation to address these problems with corporate American right now. We should be working a bill reduce the power of corporate America with which this administration has been in bed. The only person who could have stopped this corporate abuse today, it appears, is the President of the United States. He misled the people of Nevada. That is the reason he is President of the United States, I am sorry to say. If he told the truth about Yucca Mountain, he would not be President. He would have lost by four electoral votes and would have lost the Presidency of the United States.

I say to my friend, the ranking member of the committee, Senator MURKOWSKI, he and I have had a lot of battles on the Senate floor. I have the greatest respect for him. He has been a gentleman and always fair to me, and although we disagree on policy issues, I cannot say enough about him being the type of legislator I think we should have.

I urge my colleagues one more time to take the road less travelled and protect people in the country, their states and Nevada.

I yield the floor and ask for the yeas and nays.

The PRESIDING OFFICER (Ms. CANTWELL.) Is there a sufficient second?

There appears to be a sufficient second.

The PRESIDING OFFICER. The Senator from Nevada has 6 minutes remaining.

Mr. REID. I yield back my time.

The PRESIDING OFFICER. The question is on agreeing to the motion to proceed to S.J. Res. 34. The clerk will call the roll.

The legislative clerk called the roll.

Mr. NICKLES. I announce that the Senator from North Carolina (Mr. HELMS) is necessarily absent.

I further announce that if present and voting the Senator from North Carolina (Mr. HELMS) would vote ''yea.''

The PRESIDING OFFICER. Are there any other Senators in the Chamber desiring to vote?

The result was announced—yeas 60, nays 39, as follows:

[Rollcall Vote No. 167 Leg.]

YEAS—60

Allard	Graham	Miller
Allen	Gramm	Murkowski
Bennett	Grassley	Murray
Bingaman	Gregg	Nelson (FL)
Bond	Hagel	Nelson (NE)
Brownback	Hatch	Nickles
Bunning	Hollings	Roberts
Burns	Hutchinson	Santorum
Cleland	Hutchison	Sessions
Cochran	Inhofe	Shelby
Collins	Kohl	Smith (NH)
Craig	Kyl	Smith (OR)
Crapo	Landrieu	Snowe
DeWine	Leahy	Specter
Domenici	Levin	Stevens
Durbin	Lincoln	Thomas
Edwards	Lott	Thompson
Enzi	Lugar	Thurmond
Fitzgerald	McCain	Voinovich
Frist	McConnell	Warner

NAYS—39

Akaka	Clinton	Jeffords
Baucus	Conrad	Johnson
Bayh	Corzine	Kennedy
Biden	Daschle	Kerry
Boxer	Dayton	Lieberman
Breaux	Dodd	Mikulski
Byrd	Dorgan	Reed
Campbell	Ensign	Reid
Cantwell	Feingold	Rockefeller
Carnahan	Feinstein	
Carper	Harkin	
Chafee	Inouye	
Sarbanes	Stabenow	Wellstone
Schumer	Torricelli	Wyden

NOT VOTING—1

Helms

The motion was agreed to.

Mr. CRAIG. Madam President, I move to reconsider the vote.

The PRESIDING OFFICER. That motion is not in order.

Under the previous order, the Senate will proceed to the consideration of H.J. Res 87, which the clerk will report by title.

The assistant legislative clerk read as follows:

A joint resolution (H.J. Res. 87) approving the site at Yucca Mountain, Nevada, for the development of a repository for the disposal of high-level radioactive waste and spent nuclear fuel, pursuant to the Nuclear Waste Policy Act of 1982.

The PRESIDING OFFICER. Under the previous order, the clerk will read H.J. Res 87 for the third time.

The joint resolution was read the third time.

The PRESIDING OFFICER. The joint resolution having been read the third time, the question occurs on passage of the resolution.

The joint resolution (H.J. Res. 87) was passed.

Mr. CRAIG. Mr. President, I move to reconsider the vote.

Mr. MURKOWSKI. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. REID. I ask unanimous consent S.J. Res. 34 be returned to the calendar.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. BYRD. Mr. President, I am concerned that many geological and technical questions associated with the Yucca Mountain plan have yet to be answered. We must ensure the safe keeping of this waste material for 10,000 years—a period of time longer than the written history of mankind. Therefore, there must be certainty that the Yucca Mountain site ensures protection of the environment and the safety of citizens. At this point, such certainty does not exist.

What we do not yet know about Yucca Mountain and its suitability as a long-term repository gives me great concern. For instance, how safe is it to house such a great volume of nuclear waste at a site that lies along a natural fault line? Can a facility be built to withstand a major earthquake? There have not been sufficient answers to these and other questions. Many scientific studies have reached the same conclusion, namely that more research is needed before moving forward with the Yucca Mountain site. Despite the incomplete scientific study of Yucca Mountain and the state of Nevada's steadfast opposition to the project, the nuclear energy industry and other parties are said to have pressured the Secretary of Energy to recommend that Yucca Mountain is a suitable site for the repository.

If Yucca Mountain is designated the primary repository for high-level nuclear waste, transportation of this hazardous material throughout the country will increase significantly. However, to date, the Department of Energy has not decided upon any plan on how to move this material to the repository. It is another in a long line of uncertainty surrounding the Yucca Mountain proposal. How will the material be moved? By train? By barge? By truck? What kind of security will be involved? There is not a single answer to any of these questions. Congress needs those answers before signing off on this plan.

We need a long-term solution to the problem of securing nuclear waste, and Yucca Mountain may ultimately prove to be a scientifically sound solution. But before we make a final decision on a repository which must have a 10,000-year life span, we must have absolute certainty of the suitability of Yucca Mountain. The safety of citizens for thousands of years to come depends on our prudence and careful deliberation.

With these concerns in mind, I voted against this proposal.

Mr. MURKOWSKI. Madam President, let me recognize the action by the Senate and thank those who participated in the debate, and Senator REID, Senator ENSIGN. I certainly understand and appreciate the position they have taken. I thought the discussion and presentation throughout the debate was certainly evidence of their concern for the State of Nevada.

On the other hand, this has been with us for a long time, 20 years. I think the Senate has acted responsibly today.

Let me thank certain staff members who have done a great deal of work. I will be very brief: Colleen Deegan, Jennifer Owen, Brian Malnak, Josh Bowlen, Macy Bell, Jim Beirne, our chart man, Joe Brenckle; and on the majority: Sam Fowler, Bob Simon, and of course Senator BINGAMAN.

Many others worked so diligently. We want to thank those in the industry who assisted in bringing this matter to the attention of all Members, encouraging that we act in a prudent manner, with dispatch. I most appreciate the two leaders who are recognizing that we can take the time today to dispose of this matter.

I yield the floor.

The PRESIDING OFFICER. What is the will of the Senate?

Mr. SARBANES. Parliamentary inquiry: What is the pending business?

PUBLIC COMPANY ACCOUNTING REFORM AND INVESTOR PROTECTION ACT OF 2002—Continued

The PRESIDING OFFICER. The clerk will report the pending business.

The assistant legislative clerk read as follows:

A bill (S. 2673) to improve quality and transparency in financial reporting and independent audits and accounting services for public companies, to create a Public Company Accounting Oversight Board, to enhance the standard setting process for accounting practices, to strengthen the independence of firms that audit public companies, to increase corporate responsibility and the usefulness of corporate financial disclosure, to protect the objectivity and independence of securities analysts, to improve Securities and Exchange Commission resources and oversight, and for other purposes.

Mr. SARBANES. What is now pending before the Senate?

The PRESIDING OFFICER. The Miller amendment, No. 4176.

Mr. SARBANES. I ask for the regular order.

Mr. GRAMM. May we have order, Madam President.

The PRESIDING OFFICER. Members will take their conversations off the floor of the Senate.

Mr. SARBANES. There is a procedural question following the Miller amendment. We have been discussing that. We may be able to resolve it, but we need to do that overnight.

I call for the regular order which, as I understand it, would take us back to the Leahy amendment, with the McConnell amendment pending to Leahy?

The PRESIDING OFFICER. The Senator is correct.

Mr. SARBANES. I call for the regular order.

AMENDMENT NO. 4175

The PRESIDING OFFICER. The amendment is now pending. The Senator from Massachusetts.

Mr. LEAHY. Will the Senator yield for a question? We are on, am I correct, the Leahy amendment which was pending to it the McConnell amendment?

The PRESIDING OFFICER. That is correct.

Mr. LEAHY. I thank the Senator from Massachusetts.

The PRESIDING OFFICER. The Senator from Massachusetts.

Mr. KENNEDY. As I understand it, the matter before the Senate now is the McConnell amendment; am I correct?

The PRESIDING OFFICER. That is correct.

Mr. KENNEDY. Madam President, this amendment of the Senator from Kentucky is what we call around here and everywhere a poison pill amendment intended to prevent serious action on corporate accountability. Just as a few Republicans sought to stop campaign finance reform with similar amendments, now they are trying to block action to make executives accountable. The lack of corporate responsibility in the United States has undermined the credibility of our markets and devastated the retirement savings of millions of Americans.

This widespread abuse of corporate power has jeopardized our Nation's economic recovery and hurt the legitimacy of our fundamental institutions. We must not call for the obstructionism of Senate Republicans. Instead, we must heed the call of the American people and insist on bold action this week to ensure that corporations are made accountable and that workers and investors are protected against these abuses.

The Leahy amendment, which my Republican colleagues seek to block, was unanimously approved by the Judiciary Committee in April. It includes critical measures to strengthen the ability of Federal prosecutors to detect, prevent, and prosecute corporate fraud. It makes acts of document shredding and corporate fraud punishable by 10 years in prison. It lengthens the statute of limitations for victims of security fraud.

Finally, the bill directs the U.S. Sentencing Commission to review criminal penalties for obstruction of justice and corporate fraud.

Today, Americans are outraged by the endless corporate scandals, and Congress must act to hold corporate crooks fully accountable and to restore confidence in our markets.

Defeating the ''poison pill'' amendment offered by Senator MCCONNELL is the first step toward that goal. Senator MCCONNELL's amendment would put America's workers in double jeopardy. The amendment puts new requirements on workers' representatives, despite the fact that these officials currently face disclosure and reporting requirements which surpass those of public companies.

This amendment would subject small local unions with annual receipts of only $200,000, which are already subject to labor reporting requirements, to the same SEC reporting requirements as large public companies which typically have resources in the millions.

The reality is that union finances are already more heavily regulated than those of most public companies. The Department of Labor under current law can investigate and audit union financial records at any time, including conducting random audits. There is no comparable requirement for public companies today.

There are many other examples of current labor laws requiring much stricter disclosure by unions than the SEC requires of publicly traded companies. Unions have to list every employee who receives more than $10,000. But the SEC does not require this of companies. Unions have to provide more detailed information regarding their loans than do public companies under SEC requirements. Unions have to provide more detailed lists of their investment today than do public companies under the SEC requirements.

The list goes on and on and on.

For over 40 years under labor laws, union officials have been required to certify the annual financial reporting of their unions under penalty of perjury.

The McConnell amendment certification requirement ignores the safeguards that already exist under our labor laws. Union officials are already subject to criminal penalties, which include jail time for willfully failing to