

made the difficult look easy, I am going to miss you; we are all going to miss you. Thank you for all you have done for Chicago and for our community. May God comfort your wife Christine and your mother and father, and may God rest and keep your soul.

Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

NUCLEAR WASTE POLICY AMENDMENTS ACT OF 1999—Continued

Mr. MURKOWSKI. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

Mr. MURKOWSKI. Mr. President, I ask unanimous consent that during the Senate's consideration today the following amendments, following a brief debate, be agreed to, and the motions to reconsider be laid upon the table. The amendments are the Conrad amendment No. 2819 and the Murkowski amendment No. 2813.

I further ask unanimous consent that the time between now and 11 a.m. on Thursday be equally divided between the two managers, or their designees, and at 11 a.m. on Thursday the pending substitute amendment be agreed to, the bill be advanced to third reading, and passage occur, all without any intervening action or debate.

I further ask unanimous consent that the time between 10 a.m. and 11 a.m. on Thursday be under the control of Senators MURKOWSKI and BINGAMAN, or their designees.

Finally, I ask unanimous consent that the cloture vote scheduled to occur on the bill be vitiated.

The PRESIDING OFFICER. Is there objection?

Mr. REID. Mr. President, it is my understanding that we will have two brief amendments, with voice votes, by Senators CONRAD and MURKOWSKI—the two amendments that have been given to the Chair in number—and after that there will be debate on the bill itself, with a half hour for each side in the morning, and there will be no other amendments considered on this legislation until final passage.

Mr. MURKOWSKI. Mr. President, that is my understanding.

The PRESIDING OFFICER. That is the understanding of the Chair.

Mr. BRYAN. Mr. President, might I further inquire?

The PRESIDING OFFICER. Yes.

Mr. BRYAN. I think that is consistent with the understanding we have. I presume that this afternoon it is in order for us to continue to debate the measure, subject to whatever accommodations both sides need to make to permit equal opportunities to be heard.

The PRESIDING OFFICER. Is there objection to the request?

Without objection, it is so ordered.

Mr. MURKOWSKI. Mr. President, in light of this agreement, I can announce that there will be no further votes today and final passage of the nuclear waste bill will occur tomorrow at 11 a.m.

Mr. REID. Mr. President, briefly interrupting the manager of the bill, I think it would be appropriate to ask for the yeas and nays on passage of the bill tomorrow, and I do so now.

The PRESIDING OFFICER. Is there a sufficient second?

There is a sufficient second.

The yeas and nays were ordered.

Mr. MURKOWSKI. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. MURKOWSKI. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

AMENDMENT NO. 2813 TO AMENDMENT NO. 2808

(Purpose: To provide a substitute amendment)

Mr. MURKOWSKI. Mr. President, I send an amendment to the desk and ask for its immediate consideration.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from Alaska [Mr. MURKOWSKI] proposes an amendment numbered 2813.

Mr. MURKOWSKI. Mr. President, I ask unanimous consent that reading of the amendment be dispensed with.

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

(The text of the amendment is printed in today's RECORD under "Amendments Submitted.")

AMENDMENT NO. 2819 TO AMENDMENT NO. 2813

(Purpose: To include the States of North Dakota, South Dakota, Wisconsin, and Michigan in the study required by this act)

Mr. MURKOWSKI. Mr. President, I call up amendment No. 2819 in the second degree offered by Senator CONRAD.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from Alaska (Mr. MURKOWSKI), for Mr. CONRAD, proposes an amendment numbered 2819 to amendment No. 2813.

Mr. MURKOWSKI. Mr. President, I ask unanimous consent that reading of the amendment be dispensed with.

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

The amendment is as follows:

On page 26, line 20 of the amendment, strike "Minnesota" and insert "Minnesota, North Dakota, South Dakota, Wisconsin, and Michigan."

Mr. MURKOWSKI. Mr. President, I know of no further debate on either of the amendments and ask the Chair to put the question on the amendments.

The PRESIDING OFFICER. Without objection, the second-degree amend-

ment is agreed to. Without objection, the first-degree amendment, as amended, is agreed to.

The amendments (Nos. 2819 and 2813, as amended) were agreed to.

Mr. MURKOWSKI. Mr. President, I move to reconsider the vote.

Mr. REID. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. MURKOWSKI. I thank the Chair.

Let me take this opportunity to again thank my colleagues from Nevada for their understanding of this difficult issue and the effect, of course, it has on their State.

I encourage other Members who are seeking recognition and who might want to speak on this issue, this would be a good time to do it because we probably have an hour or two left today. Time being what it is in the morning, we have yet to hear from leadership as to what time the Senate will convene tomorrow.

Might I inquire of the Chair, is there any indication of that?

Mr. REID. Mr. President, will the Senator yield?

Mr. MURKOWSKI. I am happy to yield to my friend.

Mr. REID. Senator BRYAN wants to speak on the bill itself this evening. We have one other Member who wishes to speak in morning business. That is all we know of this afternoon. As the Senator indicated, if there are other Senators who wish to come and speak on this legislation, or as if in morning business, they should work their way over to the Capitol.

I also say to my friend that I haven't spoken to either leader, but I think we probably would come in at 9:30 in the morning. That is the normal time. Senator THURMOND is available.

Mr. MURKOWSKI. If I may respond to my good friend from Nevada, I don't think we have been able to ascertain when. But I join him in encouraging Members to come over and speak at this time. I have been notified that Senator CRAIG will be coming over this afternoon. Senator DOMENICI will be coming over, and I believe Senator SESSIONS. In any event, there probably will not be a lot of time tomorrow.

Mr. REID. If the Senator will again yield, it was the understanding of the minority that the time between 10 a.m. and 11 a.m. would be equally divided. It doesn't matter when we come in, just so everyone understands that.

Mr. MURKOWSKI. Yes. I certainly agree with my colleague from Nevada. That hour is to be split between both sides.

I would like to continue for a moment, if I may. There are a couple of points that I think are necessary to highlight. They concern the issue of the Environmental Protection Agency and just what the role is as determined by the changes we made.

I refer to language that is on pages 3, 4, and 5 as opposed to the statement we have from the administration on their

position. I should point out, that statement was given on February 8. It is a statement of administration policy. It states that as of February 4, 2000, the manager's amendment to S. 1287—I understand this amendment will be brought to the floor—undermines EPA's existing statutory authority to set standards to protect public health and the environment from radioactive releases. As a consequence, it is unacceptable to the administration because they say it undermines EPA's existing statutory authority and is, therefore, unacceptable.

They further acknowledge that the amendment allows EPA to exercise its existing authority to set appropriate radiation release standards for Yucca Mountain. It will allow another entity to block EPA's authority until June 1, 2001. Consequently, if the February 4, 2000, manager's amendment to S. 1287 is approved, and if the Senate bill with these provisions is presented to the President, the President will veto the bill.

I appeal to the administration. According to the Washington Post article which I read, the White House says it opposes the bill because it would take away from the EPA the sole authority to determine radiation exposure requirements at a future permanent waste repository if it is built in Nevada.

Let me read what it says.

Adoption of standard:

Notwithstanding the time schedule in section 801 of the Energy Policy Act, the administration shall not publish or adopt a public health and safety standard for the protection of the public from releases from radioactive materials stored or disposed of in the repository at the Yucca Mountain site except in accordance with this section before June 1st, 2001.

To suggest that they don't have the sole authority is not what the legislation says. It says they shall not have the authority to publish or adopt before June 1st, 2001.

Further, relative to this portion, it says: not later than April 1st, 2001, the Commission and the National Academy of Sciences shall, based on the proposed rule and the information provided by the Administrator—that is, the Administrator of EPA—under paragraph 1, shall submit a report to Congress on whether the proposed rule is consistent about section 801 of the Energy Policy Act;

Or, B, provides a reasonable expectation of the public health and safety and the environment will be adequately protected from the hazards posed by high-level radioactive waste and spent fuel disposed of in the repository;

And, C, it is based on the best reasonable obtainable scientific and technical information concerning the need for and consequences of the rule;

And, D, imposes the least burden consistent with obtaining the regulatory objective of protecting the public health and safety and the environment.

No. 3, in the event that either the Commission—that is, the Nuclear Reg-

ulatory Commission—or the National Academy of Sciences finds the proposed rule does not meet one or more of the criteria issued in paragraph 2, it shall notify the Administrator—that is, the EPA Administrator—not later than April 1st, 2001, of its finding and the basis for such finding.

I repeat that the Environmental Protection Agency has the final say and, under the statute, shall have the sole authority to address the levels of radiation but not before June 1st, 2001. We have not heard from the administration relative to those changes. I hope the administration will be sensitive to our effort to ensure that, indeed, the Environmental Protection Agency will have the last word.

The objective is not to take away from the obligation of the EPA, which has the authority under statute. The effort is to bring forth the best science available. If the Nuclear Regulatory Commission that licensed and monitors the plants has more Ph.D.s in the area of nuclear science and the National Academy of Sciences can contribute something, is that not in the public interest?

Again, I appeal to my colleagues to recognize our bottom line is simply to have an emission standard that is attainable and that allows Congress to address a final resting place for the waste.

Senator KERREY's office advised me he wishes to be deleted as a cosponsor of the amendment. I ask unanimous consent that request be honored.

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

Mr. MURKOWSKI. I assure my colleagues, Senator BINGAMAN, and the administration of our willingness to use the remaining time to try to be responsive to their concerns.

I will summarize the situation. We have been at this a long time. We all agree we have an obligation as elected representatives to resolve this problem. The failure of the Government—certainly not under this Secretary of Energy—to take the waste in January of 1998 is what we are living with today. The ratepayers have paid \$15 billion in electric rates on their bills with the assumption the Federal Government would take that waste; the damages and the claims go on and on and on as a consequence of time passing as that waste remains at the sites of our nuclear plants. The nearest estimate we have is \$40 billion to \$80 billion. The longer we wait, the greater the burden of the taxpayer. I think the public looks to Congress to address this with resolve.

Some have suggested this administration simply does not want to resolve this matter on its watch. That may be the basic position of the administration. That may be justified in their minds. There is another group out there that sees the passage of this legislation to resolve what we will do with our nuclear waste as some kind of a significant benefit to the nuclear in-

dustry. If they can defeat this and bring the industry to its knees by causing it to choke on its own waste, nuclear power as we know in this country will die. It will reach a slow process of strangling on that waste, the nuclear power industry will go away, and we will simply generate power from some other source.

The difficulty I have with that is the inability to identify what that other source will be and what it will do to our air quality. To me there is a trade-off in the process. If we lose the nuclear power generating capacity, which is about 20 percent in this Nation, what will we replace it with?

We have to solve the waste problem. If this administration does not want it to occur on its watch, we are still going to have to solve it under another administration, whether it be Republican or Democratic, or we are simply going to add this obligation of the damages to the American taxpayer. I think we are all in agreement that we simply must deal with it. We have an equal responsibility.

I gave an interview a few minutes ago. The first question was: Senator, why can't you resolve this? I am sure all my colleagues know why we can't resolve it. Nobody wants the waste.

Unfortunately for our good friend from Nevada, a decision was made to proceed with Yucca as a permanent repository some time ago. We have spent over \$6 billion. The tunnel is drilled. We are awaiting licensing. That is where we are.

I am also told the administration is split on this. Some would like to see it resolved. Some don't want it resolved at all.

I guess it rests with each Member to recognize his or her responsibility as elected representatives to bring this to a resolve responsibly. If somebody else has a better idea of how to resolve it responsibly, they can certainly have this dais, the microphone, and whatever else goes with it.

I yield the floor.

The PRESIDING OFFICER (Mr. SESSIONS). The Senator from Idaho is recognized.

Mr. CRAIG. Mr. President, I am pleased to come to the floor this afternoon and support the chairman of the Energy and Natural Resources Committee in an effort he has led for a good number of years. I have participated with him in trying to bring some reasonable resolution to the issue of a permanent repository for the high-level nuclear radioactive waste of this country.

Mr. President, this debate will proceed. It is my understanding we have a vote tomorrow morning. Already we have heard a variety of opinions on the process used to deal with the issue of high-level nuclear waste. Without question, this is an issue that Congress has dealt with over the years in which the public has had to go through more misstatements, false statements, or emotional statements about what isn't

true or what some wished might be true. All we can do is look at the scientific and engineering facts of the history of the management of nuclear waste in our country to say that this country, about 99.9 percent of the time, has done it right and not exposed their citizenry to the mismanagement of the storage of waste.

Yes, we have learned periodically of the handling of radioactive materials where mistakes were made and immediately corrected. However, our country has a positive legacy in nearly all instances of dealing with this issue.

The Senator from Alaska and I have brought different versions of this issue to the floor over the last 4 years as we have tried to force this administration to move responsibly following the enactment of a law in 1982 that was a long-term approach toward funding and establishing a permanent geologic repository. We are now at a time when the issue of radiation release standards at what may become the permanent geologic repository at Yucca Mountain has been largely the focus of what this legislation deals with.

It think it is important to put the debate in the context of what is happening under current law, not under the legislation, under the law as it stands today.

My purpose in describing the current situation is to explore with my colleagues what I believe is a problem with EPA's current path and for my colleagues to understand why I have reservations about the games that are currently being played.

My frustration with EPA is that sometimes their science is rolled up in politics.

Let me also be clear about what is at stake. I firmly believe, if Congress does nothing on this issue, what is at stake is the viability of geologic disposal. In other words, to me this issue is larger than the site at Yucca Mountain. It is about whether or not we will be able to site and license a geologic repository anywhere in our country.

It is not by accident that legislatively we picked Yucca Mountain years ago. It was not done with a crystal ball. It was done with some reasonable knowledge that the geology of the region might well hold up and would probably be a point of isolation of the kind we would want for a repository, compared with no other place in the Nation. That has still held up and remains true today.

I do not believe the current process for setting radiation standards in dealing with this is what I would hope we would have. It is not being informed by good science, and I hope that Congress will bring good science back into the process. That is why this legislation is very important.

The chairman's original bill, S. 1287, contained the remedy of giving authority to set radiation standards to the Nuclear Regulatory Commission. Why? Credibility. Honesty, no politics, in large part, and a historic standard of

doing it with the kind of science and knowledge that you want to have to make these kind of decisions.

The chairman's substitute bill has a different remedy. EPA would still set the radiation standards but only in consultation with the NRC and the National Academy of Sciences.

I wish EPA were not setting those standards. I don't think they have the scientific knowledge or credibility to do so, although we have created this myth about them because it says: They are the Environmental Protection Agency. Surely their commitment is to the environment.

Sometimes their commitment is to politics. You cannot say that about the National Academy and you cannot say that for the NRC. So what we have tried to do and what the chairman, I believe, has successfully done is bring all this together. Therefore, we can maybe satisfy the political side of it and, I hope above hope, we can address the scientific and the engineering side of it in a way that is credible and, most important, safe for our public and, of course, safe for the State of Nevada. Both of these approaches are superior to the current situation which I would like to describe.

Today, the Environmental Protection Agency is responsible for setting the radiation standards at the Yucca Mountain repository. That authority was granted to EPA in the Energy Policy Act of 1992. So on August 19 of last year, 1999, the EPA finally proposed a draft radiation standard. That draft standard is lengthy and has a lot of technical detail, but it boils down to two critical items. In other words, when you sort through the chaff, here are the facts that make this issue important.

First, EPA's draft proposes an individual protection standard from all exposure pathways—food, water, air, et cetera—of no more than 15 millirems per year.

Second, EPA proposes a ground water protection standard that limits ground water contamination to levels at or below EPA's maximum contaminant levels for drinking water—drinking water, in an area where none is drank, or where there are no people to drink it.

What that means, in simple terms, is that if we are able to sink a well at the repository and draw the water up and into a glass, EPA says you have to be able to drink that water straight from the ground without treatment.

Not much water is consumed without treatment today, except maybe in an isolated farmsteads and in some rural areas. There are very few places, even in remote wilderness areas, where I would be willing to sample drinking water in the way I have just described it. Even in some of the pristine, beautiful areas of my State of Idaho, I suggest you do not drink from a stream. My forebears were able to do that, but today you might get a bacterial contamination known as Giardia.

So we have a 15-millirem standard overall for Yucca Mountain and requirements for underground water that translates, I am told, to a limit of about 4 millirem exposure from underground water. Those are technical terms. That is why I have tried to break them down to a simple explanation as to what it might mean.

What I want my colleagues to understand is that these levels, 15 millirems and 4 millirems, are measured against a background level, a point of measurement. You have to have that to determine any increases. You go to what is known as a background level of naturally occurring radiation—from the rocks, the nature of rocks, and of course the Earth and the atmosphere itself—naturally occurring radiation of about 300 millirems per year.

Yucca Mountain is located in a very arid, desert environment. If you had to try to find a site within the entire contiguous United States where you might have some hope of meeting a 4-millirem ground water standard, Yucca Mountain is the kind of site you would want to pick. Yet even in the case of Yucca Mountain, the period of performance is so long and the radiation limit is so unrealistically stringent that there is some doubt that the Department of Energy will be able to demonstrate with absolute certainty that a 4-millirem ground water standard could be met.

If a dry, desert site cannot meet a 4-millirem ground water limit, it is reasonable to question whether any site anywhere could meet this unrealistic standard.

I could talk at length about how ridiculous I find these kinds of radiation limitations, but I think there is a body of criticism of EPA's proposal already existing in many of the comments that have been submitted by experts—not politicians but by experts on EPA's draft. Perhaps it will be more persuasive to my colleagues if I quote from the comments submitted to EPA by radiation experts regarding this draft radiation standard.

The American Nuclear Society, which is a nonprofit professional association made up of 11,000 members who are nuclear scientists, engineers, administrators, educators, physicians—you notice in that list I did not say politicians; they do not have a reason to be political, they are professionals in an area of importance to this country—they submitted comments on EPA's radiation standards. The American Nuclear Society had the following to say regarding the 15-millirem proposal:

The individual dose limit that EPA is recommending is not appropriate.

That is what they said.

EPA points out that the proposed dose limit of 15 millirem per year is far below the level of background radiation—

I have already mentioned that—(about 300 millirem per year) and that any hypothesized effects of background radiation are not detectable against the rate of health

effects in the general public. While this is certainly true, we believe that the Nuclear Regulatory Commission has a better basis in scientific logic than EPA. The individual dose limit that the NRC has proposed (25 millirem per year) is also lower than warranted. . . . [W]e conclude that a dose standard of 70 millirem for the repository alone is appropriate, conservative, and adequately protective.

So the American Nuclear Society, an association of these 11 million professionals, has endorsed a radiation standard as high as 70 millirem per year.

What does the American Nuclear Society have to say about the 4-millirem groundwater standard? They say the following:

A ground water standard is unnecessary. . . . EPA's reasons for applying a groundwater standard appear to stem from a desire to influence the engineering design of the repository and to reduce collective dose to the general population, neither of which is appropriate. Both approaches are inconsistent with the National Academy of Sciences conclusion that an individual dose standard is adequately protective. . . .

In other words, you do not need to do both.

[V]ery small individual doses are not meaningful in assessing public health impacts. . . . In addition, the Linear, Non-Threshold theory of radiation health effects is being questioned with increasing intensity, and a body of scientific opinion exists today that holds it to be without scientific basis. . . .

If it is "without scientific basis," then maybe the only basis left is a political basis. That is the frustration with which the chairman and I have had to deal for the last few years as we have tried to bring this issue to completion so the American people would know they had a permanent, safe repository in which to put high-level nuclear waste.

How do other nuclear experts look at this? Let me turn to the comments submitted to EPA by the Nuclear Regulatory Commission in a letter dated November 2, 1999, providing NRC's review of EPA's draft 15 and 4 millirem radiation standard.

On the ground water standard, NRC commented the following:

The NRC staff objects to the inclusion of separate groundwater protection requirements for the proposed repository at Yucca Mountain because these requirements would result in non-uniform risk levels, they misapply the Maximum Contaminant Levels . . . and they far exceed what is needed for protection of public health and safety.

If the public is listening to me or if they have listened to some of this debate, they would say: But, Senator CRAIG, don't you really want to make this as safe as humanly possible?

The answer, of course, is yes. The only problem with what EPA is saying is that if we make it that safe, we cannot make it. Of course, I am sure my colleagues from Nevada hope that would be the case. If that were true and if it were to become true, this Nation would still be without what the world of engineering and science says is a safe, permanent repository for nuclear

waste. Why? Because we allowed politicians instead of scientists to make a determination as to what is right and how this facility ought to be constructed for the purpose of long-term safety.

What does the NRC have to say about the 15-millirem limit as compared to the NRC's proposed 25-millirem limit per year? Again I quote from the NRC's comment letter to EPA:

Although the EPA rule proposes a lower limit of 15 millirem, and the difference between 15 and 25 millirem is small, the lower value is not necessary for protection of public health and safety and would provide little, if any, reduction in health risk when compared with 25 millirem. It is also important to consider that the average American receives approximately 300 millirem per year from background radiation.

Oh, my goodness, you mean we are all being irradiated as we stand here or as we travel in our cars or live in our homes or walk in our back yards? The answer is, yes, we are. It is natural. Shame on that Sun and shame on the ground and shame on the minerals within the ground because they collectively give us 300 millirem per year in background radiation.

NRC goes on to say:

In addition to the lack of public health and safety benefits, there are regulatory concerns associated with lowering the dose limit to 15 millirem. Specifically, as the dose limit becomes smaller, limitations in the DOE's models used for estimating performance, and the associated uncertainties in supporting analysis, become more pronounced.

In other words, how you prove your case becomes more complicated.

Further, a 15 millirem dose limit is likely to cause unnecessary confusion for the public and cause the NRC to expend resources without a commensurate increase in public health and safety.

Zero risk. Is it possible in the world today, with all of our talent, all of our intelligence, and the best computers in the world, to construct a zero-risk environment? The answer is no. It cannot be done. It is humanly impossible under any circumstance for any situation; not just for radioactive material, but automobiles and planes, walking across the street, or riding the train back to our offices in the Senate. Zero risk? No. It does not exist. It does not exist in science, and it does not exist in the environment. It never has, and it never will.

Yet I am quite sure the public believes we are so sophisticated today that we in fact could create that with the unique talents of this country. We cannot. It is important we say that. That is why we have professionals determine what is doable, right, and responsible, and that is all tied with costs and the ability to create.

What the NRC is saying by that—"the expending of resources without commensurate increase in public health"—is one can lower it to such a level of safety that there is no justification to go beyond that.

I could continue quoting from these various radiation experts for a very

long while because the list is long; remember, experts not politicians. Their objections to EPA's current draft radiation standards reflect a very thorough and well-researched review of EPA's proposal, and the criticisms of these experts should inform our debate as we struggle to understand what all of these numbers mean and what they mean for the future of this country's nuclear waste disposal program.

But I think perhaps DOE said it best, in a letter to EPA transmitting DOE's comments on the draft radiation standard. And the reason that I like this quote is, I think it sets the larger context for what these radiation standards mean for our ultimate success or failure.

DOE says the following:

EPA's standards will play a pivotal role in achieving the long-standing policy of the United States to properly dispose of high-level radioactive waste and spent nuclear fuel in an underground mined geologic repository. The Nuclear Regulatory Commission must implement EPA's standards in its regulations for licensing a repository at the Yucca Mountain site, and DOE must be able to comply with those NRC regulations in order to construct a repository. If EPA were to select unrealistic, unnecessarily conservative, or non site-specific standards, the result could be the rejection of an otherwise suitable site, and the de facto rejection of the geologic disposal option without commensurate benefit to the protection of public health and safety. Such rejection would not avoid the consequences of radioactive water management, but it would require resort to a different and currently undefined approach.

I think the statement I just read describes the situation we are in now with EPA's unrealistic and unsupportable draft standard. I hope my colleagues will agree with me that this is a situation Congress must act to correct, by bringing good science back into the process of setting a radiation standard.

We need a disposal program. Congress, more than a decade ago, chose a course, a path. We began to tax the ratepayers of the utilities that have nuclear generation in this country to pay for that path.

That is where we are today. Some resist that path using all the reasons they can humanly generate, and that is why it is important we have this legislation. I hope the Congress can pass it and the President will sign it.

Those are the issues with which we have to deal in understanding this problem. It is critically important to our Nation.

At lunch today, I addressed a group of congressional staff and people in town who represent energy companies and those who do not. I said: I find it fascinating that the administration would want to take us through a climate change initiative, known as the Kyoto Protocol, in which they want to reduce carbon emissions in this country; therefore, we would have to reduce the use of fossil fuels which are currently our most abundant source of energy. In doing so, they are also not

willing to find a way to deal with nuclear waste, so that we can see an extension of the nuclear generation of our country for electricity. They are downplaying that energy source also, and, at the same time, we have a Secretary of Interior who wants to blow up hydro dams. They downplay hydro, and they will not even put hydro in the renewable resource category.

I find it fascinating, a country that exists on energy, an economy that is being driven today by artificial intelligence as a new industry, and that very industry operates on electricity itself.

I see our staff on the floor with computers in front of them. If you turned off the power of that computer, its brain would go dead, we would no longer have the tremendous expansion of this economy from which we are all benefiting. Yet we have an administration phenomenally resistant to the establishment of a permanent repository for nuclear waste but is open to the idea that if you do not handle the waste, you will ultimately kill the industry; and if you kill the industry, you will never build another nuclear reactor to generate environmentally clean electrical energy. And they want to get rid of the dams and they want to stop burning fossil fuels. Oh, my goodness.

What a reality check for our country, to have as our national policy no energy policy at all. Our wealth and our very existence, as a major economic force in the world, has always been built on the abundance of reasonably inexpensive but readily available energy.

That is a part of all of this debate. I think it is probably separate from what my colleagues from Nevada would say in opposing this legislation. Obviously, they have to reflect the politics of home, as they should.

But for a President to say, in a relatively unspoken way, as a policy for the country, we have no energy policy at all—we do not even have an energy strategy except maybe a few windmills and solar cells—it is no policy at all.

That is why we are on the floor trying to close the link between the generator of electrical power, by the use of the atom, and the necessity to have a responsible method for handling the waste that is created by that form of generation.

While the rest of the world around us builds nuclear reactors for generating power, and has responsibly handled their waste—and has used, in large part, our technology to do so—we have been bound up in the politics of it for well over a decade. I hope, finally, an opportunity exists for us to break through it.

In my opinion, this is one of the most significant environmental bills we will have before the Congress this year. While those on the other side would like to cast it as antienvironment, finding a way to collect the nuclear waste of this country, and putting it in

one safe spot, far from any human being, high in the dry desert of Nevada, seems to me, and a lot of other people, to be darn good policy.

So let me thank my colleague from Alaska for his leadership. While he and I over the years have had disagreements on this issue, we have worked them out. We have asked the Senate to work with us to work out the differences. In most instances they have because this policy is too important for the normal course of politics that it has been served. This is an issue whose time has come. I hope the Senate and the House recognize that as we attempt to deal with it.

Again, I thank my chairman and yield the floor.

Mr. BRYAN addressed the Chair.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. BRYAN. Mr. President, I acknowledge that this piece of legislation, as it has worked its way from the committee to the floor, is better than its original form. But the old adage that you can't make a silk purse out of a sow's ear is applicable to this piece of legislation. It represents exceedingly bad policy.

I am bemused by my friends who are advocating on behalf of this piece of legislation in that laced throughout their comments is the suggestion that somehow those of us who oppose this legislation are "playing politics." I think it is important, once again, to recite a little of the history.

In 1982, when the Nuclear Waste Policy Act was enacted into law, Congress made a judgment. I think it was a sound judgment. Congress concluded that it lacked the expertise to set public health and safety standards. They chose the Environmental Protection Agency, which is responsible generally for setting health and safety standards, as the appropriate agency to serve that function.

I think that was a sound policy judgment. It was to use the language I frequently have heard on the floor, responsible. It was good science. It was responsible then and it is responsible now.

Had that 1982 piece of legislation gone unchanged, it would have set in motion a chain of events that would, in fact, have at least been, at the outset, predicated upon science and not politics.

As I have said before in this Chamber, I think that piece of legislation was a balanced approach. It would search the entire country and look for the best possible geological formations. We would have had regional equity so no one part of the country would bear it all; that three sites could be studied. Once they met the scientific criteria, they would be submitted to the President of the United States. The President would select one. I think that is fair. I think that is balanced. I think it is good science.

Let me respond to this issue of politics because I am both bemused and frustrated.

The first example of politics is the Department of Energy's own decision to eliminate one particular section of the country from any consideration at all in terms of being considered. That was the Northeast. The Department of Energy, in their internal documents, said: The political resistance will be too strong. We will never be able to get a site established in that part of the country, even though granite may be an acceptable geological material in which to place a repository.

What was that? Was that science? Was that responsible? It was politics—not politics played by the Senators from Nevada or the good people of my State but politics by the Agency.

As I stated yesterday, in 1984, we had a Presidential election. During the course of that election, the then-incumbent President said: Look, we're going to eliminate the folks in the Southeast. Salt dome formations will not be considered.

Was that science? Was that responsible? It was politics—not politics by the Senators representing Nevada at that time, nor politics by the people in our own State.

What occurred? In 1987, the law was changed so that only one site would be studied at Yucca Mountain. I have expressed my strong opposition to that. I do not like it. Was it science? Of course not. Was it responsible? Of course not. That was naked politics—naked political aggression visited upon my State. You have heard me characterize that legislation as the "Screw Nevada Bill," as it is known throughout my State. That is politics—politics played by the Senate and the House of Representatives and the President in offering what was originally a balanced piece of legislation. There is not a scientist in the country who would argue that those changes were made in the interest of science or that they could be categorized as anything else other than a political decision.

My point is, this process, that was set out in the 1982 Nuclear Waste Policy Act, is self-executing. It sets forth the process as to how we ultimately make this determination.

What has occurred over the years is the injection of politics—originally on a regional basis and now, as we debate it on the floor, with the nuclear utility industry.

I suspect there are very few people who are listening to this debate who can define a millirem or tell us the difference between a millirem and a kilowatt. I confess that I am not a scientist. So let me try to categorize this as best I can in terms of what we are doing.

In the location of the transuranic waste storage facility in New Mexico, the Environmental Protection Agency, then as now, is charged with the responsibility of setting a health and safety standard.

These are the basic principles involved: A geologic repository designed to isolate radioactive waste from humans and the environment. That is

what is occurring at Yucca Mountain. I don't like it, but that is what is occurring. That is going forward. This notion that there is an overriding necessity to enact some new piece of legislation is simply not true. This process continues. Sometime at the end of this year, perhaps, there will be a finalized environmental impact statement, and a couple or 3 years down the road there will be a recommendation for site selection. None of that has occurred at this point. It may occur down the road. It has not yet occurred. No reason to act other than that the nuclear utility industry, in the middle of this ballgame, wants to move the goalposts because they cannot be sure the guaranteed outcome they seek, irrespective of public health and safety—namely, opening the repository at Yucca Mountain—can occur if, indeed, public health and safety considerations are allowed to prevail.

So we have essentially a geologic repository designed to isolate radioactive waste. The Waste Isolation Pilot Plant and Yucca Mountain share the same. The possibility of widespread contamination of both food and water sources and the human population likewise is a concern of the WIPP facility and Yucca Mountain. Radiation standards are to be established by the EPA to protect human health and the environment; that is true with WIPP, and those standards had been set at 15 millirems, and Yucca Mountain.

So I think the question has to be asked: Why should Yucca Mountain be treated any differently? Is there a scientific reason? The answer is no. It is a political reason: to accommodate a nuclear utility industry which exercises enormous power and influence in the Halls of Congress and, frankly, wants to change the rules of the game in midstream; not to protect public health and safety but to get rid of nuclear waste irrespective of the consequences.

We could talk about background radiation and all of that sort of thing forever and ever. I think this is the most important issue: Is the standard that was set for the WIPP fair and reasonable? I assume that it is. There was no controversy attached to that. Nobody said we ought to take the EPA out of that; we ought to put in the Nuclear Regulatory Commission. There was no objection to it. It moved forward.

Is the EPA being reasonable and responsible and scientific? I think the answer is clearly yes. The 1992 energy bill, which has been referenced in this debate, had inserted a provision which said the National Academy of Sciences needs to take a look at whatever the EPA standard is to see if it is reasonable and within a recommended range. They have done that. Here is what the National Academy of Sciences' recommended range. This is the millirems we are talking about, which simply means the amount of radioactive exposure an individual can have in a given year from this source. What was proposed at WIPP? Fifteen millirems. The

EPA proposes 15 millirems at Yucca Mountain.

Now, S. 1287 in its original version, not the bill we are now debating, had a 30-millirem standard. What does the National Academy of Sciences say? I confess, I don't know the difference between 2 millirems and 3 millirems. I suspect if my colleagues are as forthright as I am, they couldn't tell the difference either.

The point that needs to be made is, the National Academy of Sciences—these are scientists; they are not politicians—says that is a reasonable standard. They say the standard, to be reasonable, could be as little as 2 millirems or as great as 20. That is a reasonable standard.

What did the EPA come up with? Fifteen millirems. Why is this debate occurring? It is all about politics—not politics in Nevada but politics by the nuclear power industry because they want a standard that is less protective in terms of public health and safety. That is what this issue is all about: public health and safety. We would not be on the floor debating today if the nuclear power industry was not pushing and driving to weaken that standard the EPA has proposed. That is a fact of life, my friends.

Let us talk about the 4-millirem standard for water for a moment. I know my good friend from Alaska is privileged to be from an absolutely magnificently beautiful State. I have been to his State. I love it, perhaps not with the same passion and conviction he does, but it is a gorgeous State. The State of Alaska, unlike the State of Nevada, is fortunate that nature has been more bountiful in terms of the amount of water it has. Nevada is the most arid of the 50 States. Las Vegas, with a metropolitan population of more than 1.3 million, is the most arid of all of the major population centers in America.

When we talk about this 4-millirem standard for safe drinking water, it has been suggested that somehow that water would have to be extracted from the aquifer—that is the underground formation in which water is situated—and would be capable of being consumed at that very minute. That is simply not true. All the 4-millirem standard deals with is the amount of radiation. That water may have other contaminants—arsenic. It may have to be subject to a whole series of processes, whether it is a reverse osmosis process, which sometimes we have to use in southern Nevada, adding chlorine to it, or whatever else might have to be done to make it fit for human consumption. But what we do not want to do is to damage a water resource which a growing State such as Nevada will need in the future.

The notion that somehow we can cavalierly dismiss the notion of a standard to protect us in terms of safe drinking water is somewhat outrageous. Perhaps if nature had been more bountiful, we could say maybe

that aquifer isn't all that important. Maybe we don't need to be concerned about it because we have water all over the place.

In point of fact, Nevada has marvelous geography. It is a State for which I have great passion, and I am eager to return at the conclusion of this year and the end of my term. But the one thing we do not have is a lot of water.

I think Mark Twain once hit it right on the head when he came to Nevada as a young man. He came believing there was a position as an assistant to his brother, who was the secretary of state during Nevada's territorial period of time. He wrote a book about those experiences. He talked about water. He said: Whiskey is for drinking, and water is for fighting.

In the arid West, water is life itself. Water is a resource that we protect because it is vitally important to us. This aquifer needs the protection, and the EPA, the agency which Congress chose, has said that a 4-millirem standard for safe drinking water is reasonable and is good science. That is science.

What is occurring here is a political effort to divert that standard from going into effect. I appreciate the candor of my friend, the chairman of the committee. We want to make sure that the measuring is under a regulation that allows waste to go to Yucca Mountain.

That says nothing about health and safety. And as a Nevada Senator, that energizes me. It angers me. It makes me very angry and I don't like the process that has occurred. I do not like the fact that Nevada was designated in a "screw Nevada bill" as the only site to be considered. I don't like that. I am opposed to that. But if it is going to occur—and that is the state of the record—that Yucca Mountain is the only place to be studied, why? And by what conceivable rationale, if there is any public morality at all, would we suggest that somehow the people of Nevada ought to be subject to a lower public health and safety standard than our good friends from New Mexico in the WIPP facility—15 millirems and 4 millirems for the safe drinking water?

As I have said, is it somehow that Nevadans are subretins, less human? I am outraged at that suggestion or notion. As offended as I am by the process by which Nevada was selected—by politics, not science—the "Screw Nevada Bill"—at least the people in our State, as this process moves forward, ought to be entitled to the basic minimum health and safety standards of the EPA.

Let me be clear. The EPA was not established by some left-wing, radical, commie sympathizer group of folks. This agency was brought to life during a Republican administration—the administration of Richard Nixon. In 1982, there was essentially a Republican Senate, and a Republican President made the determination in this piece of legislation—the Nuclear Waste Policy

Act—that the Environmental Protection Agency was the appropriate place for the determination to be made in terms of public health and safety standards.

So I submit that you don't have to know a lot about millirems, or about aquifers, and you don't have to know a whole lot about this issue to understand that the one agency that is charged by law with providing public health and safety, the Environmental Protection Agency, was charged with that responsibility 18 years ago in this act, and has exercised that responsibility with WIPP, and there was not a murmur—no suggestion—that that was somehow radical, that it was political, not science.

We are simply asking for no more and demanding that there be no less protection for us. That is really all you need to know about this argument. It is simply an attempt to reduce those standards. And somehow to suggest that unless we pass this piece of legislation, this process that began back in the early 1980s to locate a permanent repository cannot go forward, that simply is not true. This process continues.

We are spending hundreds of millions of dollars studying that Yucca Mountain facility to see whether or not it is suitable, and that is ongoing. That would continue, much to my regret, as I have indicated, if this piece of legislation had never been conceived or seen the light of day.

What is involved here is the nuclear utilities. Yes, sure, they would like the American Society for Nuclear Engineers to make the judgment. It doesn't give me, as a citizen, great comfort that crowd is going to be more concerned about my health and safety, that of my children and grandchildren—two of whom live in Nevada—but the EPA has a pretty decent track record, and it was not challenged previously—not challenged.

So what this is all about is to kind of bump this standard over into next year. Presidential politics. We know we are going to have a new President, and the hope of the nuclear utility industry is that a new President will say to the nuclear utilities, look, you can have whatever standard you want. I hope and pray to the good Lord that does not occur, but that is what this is all about. It is not necessary. It is not scientific, and it is not responsible to proceed on the course of action that we are asked to follow in this piece of legislation.

I appeal to my colleagues in the name of fairness. All we are asking is to have the same measure of protection that is accorded to the good people of New Mexico with respect to their nuclear facility, which the Nevadans will be entitled to if Yucca Mountain is ever determined to be scientifically and suitably situated for the receipt of that waste. That is not an unreasonable premise. It is not an unreasonable request. We are not asking you to repeal the "Screw Nevada Bill," much as

I object to the political way in which our State was savaged for it. That is a fight for another day.

Having had that piece of legislation shoved down our throat, we certainly ought to be entitled, as human beings who happen to live, as I do, within 90 miles of that site, to the protection of the agency that is charged by law with protecting the health and safety recommendations, and that an independent oversight group, the National Academy of Science, says is within the recommended range.

What is wrong with that? The answer is, nothing is wrong with that except the politics that the nuclear industry would visit upon this Chamber and say: Look, you have to help us out; I am not sure we can make that standard. Reduce it, dilute it, kick it over until next year, and maybe we will get a new President who will be less responsive to the concerns of public health and safety.

I ask my colleagues, when we vote on this at 11 o'clock tomorrow, to reject this ill-conceived piece of legislation. It will be vetoed by the President and opposed by the EPA, opposed by the Council on Environmental Quality, and by every environmental organization of which I am aware.

It is said that this is an important piece of environmental legislation. Let me correct the RECORD. This is not an important piece of environmental legislation. If this is allowed to occur, this is an environmental travesty. I hope my colleagues will not allow that to occur.

I yield the floor and suggest the absence of a quorum.

The PRESIDING OFFICER (Mr. MURKOWSKI). The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. SESSIONS. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

Mr. SESSIONS. Mr. President, I want to join the occupant of the chair on his remarks in support of this legislation, which is far too long overdue and which has cost the taxpayers money because your efforts to see it passed have been frustrated.

The leadership you, and others have given to this bill has made a compelling case for its passage. I believe we ought to move forward with it, and hopefully we will this time.

I do not agree with some who say this is not an important piece of environmental legislation. It clearly is. We have nuclear waste all over this country in nuclear facilities in less than ideal conditions. That waste can be moved to an ideal location approved by the Federal Government. This is a bill which would help make that happen and clean up the environment.

I would like to share some thoughts. I come at this with a little bit of a different view, as I am sure others do. I don't speak for anybody else, and cer-

tainly not the chairman who has advocated this legislation so ably. I would like to share a personal insight into where I am coming from with regard to this legislation.

During his State of the Union Address, President Clinton remarked:

"The greatest environmental challenge of the new century is global warming. The scientists tell us that the 1990s were the hottest decade of the entire millennium. If we fail to reduce the emission of greenhouse gases"—that comes from burning fossil fuel—"deadly heat waves and droughts will become more frequent, coastal areas will flood, and economies will be disrupted. That is going to happen, unless we act."

But just because the President declared it so does not necessarily make it so. Science surrounding climate change is very complex. In fact, NASA has found through satellite data that the upper atmosphere has not warmed at all over the last 20 years. But, regardless of that, we don't know what is happening out there. Change is always about.

The notion that our coastlines will flood or that heat waves will plague the world is a view that is shared by a lot of radical environmentalists, non-growth people in this country and around the world. Some scientists have actually studied the matter, however, and concluded that there are many beneficial changes that occur when carbon dioxide levels increase. If there is more carbon dioxide in the atmosphere, plants grow better. They suck in carbon dioxide and emit oxygen in the process of life that all plants go through.

Regardless of who is right and the status of this debate, all of us should look forward to working together in developing a plan to reduce air pollution. In doing so, we will at the same time reduce these greenhouse gases, many of which are not damaging to our health. But we will do that anytime we reduce pollution, as a general rule.

The largest component of greenhouse gases, of course, is carbon dioxide, CO₂, which is not an unhealthy gas. President Clinton and Vice President GORE have already tried to commit our country, through the Kyoto global warming treaty, to an agreement which would call on the United States to reduce greenhouse gas emissions by 7 percent below the 1990 level by the year 2002. That was a goal of Kyoto. The Vice President was adamant about committing the United States to reducing emissions 7 percent below 1990 levels by 2012, just 12 years from now. And the United States already produces greenhouse gas emissions that are 8 percent over 1990 levels.

The Energy Information Administration predicts that the United States, however, will need about a 30-percent increase in electricity by the year 2015. We are talking about reducing greenhouse gases in the next 12 years by 15 percent from current levels during a

time when we need a 30-percent increase in power. It is going to be very difficult to do under any circumstances.

But at the same time we are faced with these difficult choices, this administration has surprisingly and openly opposed the use and continued development of the only options we have to realistically meet the emissions reduction goals—nuclear power and natural gas.

Nuclear power currently provides over 20 percent of the electric power in this country. Given the state of energy technology today, a critical component of our emissions reductions plan should be the safe use of nuclear power. We must maintain this energy source, perhaps making it a larger source of our energy mix, and not dismiss its future use outright by opposing this critical legislation.

As an example of the environmentally friendly capacity of nuclear power, consider this: Between 1973 and 1997, nuclear power generation avoided the emission of 82.2 million tons of sulfur dioxide, and more than 37 million tons of nitrogen oxide, which would have been released if that electricity had been produced by fossil fuel plants. In 1997 alone, emissions of sulfur dioxide in 1 year would have been about 5 million tons higher, and emissions of nitrogen oxide would have been 2.4 million tons higher had fossil generation plants replaced this nuclear generation. In addition, literally billions of tons of carbon and millions of tons of methane emissions—believed to be the most significant greenhouse gas—could have been avoided by the sensible use of nuclear power in this country.

Even though we are still fighting health problems associated with pollution, a problem that is measurable and real, the safe use of nuclear power in this country and elsewhere has helped all of us to breathe easier. In fact, there has not been a single incident in this country of a person being significantly injured or losing their life at a nuclear power plant in the entire history of US nuclear power production. That wouldn't have been true at plants burning coal. How many coal trucks have had wrecks and killed people? How many coal miners have been injured or killed? How many people have been killed in moving gas through pipelines and that kind of thing? Nuclear power has actually been much safer than those options.

Indeed, other countries are far ahead of us. In France, 76 percent of their power is nuclear. And soon, 50 percent of the power in Japan will be generated by nuclear plants. Nuclear powerplants provided some 16 percent of the world's energy production in 1998. Yet the United States hasn't proposed to build a new plant in over 23 years. One reason is the cost is rising and is being driven up by our inability to dispose of even small amounts of nuclear waste.

On November 8, 1997, just after signing the Kyoto greenhouse gas treaty, Vice President Gore stated:

There are other parts of the Earth's ecological systems that are also threatened by the increasingly harsh impact of thoughtless behavior: The poisoning of too many places where people—especially poor people—live, and the deaths of too many children—especially poor children—from polluted water and dirty air.

Perhaps the Vice President should heed his own rhetoric and stop the thoughtless behavior put forth by his own administration that has discouraged both the use of nuclear power and the production of our cleanest fossil fuel—natural gas.

On September 3, 1999, Vice President GORE pledged to stop the new leasing of oil and gas sites offshore.

It is really a stunning thing. We are producing natural gas mainly in the Gulf of Mexico at unprecedented rates. And we have the opportunity, through recent discoveries there, to produce even more. Producing more natural gas in this country will reduce our burden on coal and it will reduce our burden on oil, which is more polluting. It will reduce our trade imbalance and debt to foreign producers in the Middle East where we are shifting huge amounts of our wealth.

Vice President GORE said we are going to stop natural gas production. He went on to state his intention to shut down even existing gas wells. Near my home in Mobile Bay, I fished around the oil and gas rigs there. It is some of the cleanest water you can find. We are having no problems with those wells.

The Vice President said:

If elected President, I will take steps to prevent any drilling on the older leases that were granted during previous administrations . . .

He is even committing to shut down current natural gas wells that are producing the cleanest form of fossil fuel energy we have today.

These comments and the policies of this administration on pollution and the environment just don't mesh. There simply is no way to meet our pollution reduction goals while simultaneously stopping the production of clean natural gas and blocking the development of a healthy nuclear power industry in this country.

The Senator from Idaho earlier said we have no energy policy in this country. We are drifting from poll to poll. Well I think he may be right.

Some say wind, solar, and biomass technologies are the way to meet our air pollution goals. I know of some good research projects. One in my home State uses switch grass and coal to help produce electricity. It is an environmentally friendly project and I hope it will be successful. While a lot of progress has been made in this area, we must face the reality that these new technologies are good steps—but they are small steps; they simply cannot be relied upon to meet our energy needs over the next 40 to 50 years.

Every day, new ideas, new procedures, and new techniques cut fuel use, allowing citizens to get energy with

less pollution. Refrigerators today are using less than half the electricity they did 15 or 20 years ago. That is good progress. The fact is, electricity consumption is up in the last 8 years despite these huge increases in efficiency. World demand also will rise.

The theory of global warming does not hinge solely on pollution in the United States. The theory suggests that global air emissions are creating, so the theory goes, a greenhouse effect that might raise the temperature around the world. I know people have become absolutely convinced this is a scientific fact; my staff and I have been doing research and I am not yet convinced. Again I repeat: NASA has monitored the temperature of the upper atmosphere for over 20 years using satellites, and they find the upper atmosphere has not warmed. Originally, the greenhouse gas theorists believed that this part of the atmosphere would be where the warming would first occur. It has not.

I point out that even members of President Clinton's own administration have recognized that nuclear power must play a large part in our energy mix. In March of 1999, Ambassador John Ritch, President Clinton's appointed Ambassador to the North Atlantic Assembly, an assembly of parliamentarians to the North Atlantic countries, commented on this issue we are debating today. He said:

The reality is that, of all energy forms capable of meeting the world's expanding needs, nuclear power yields the least and most easily managed waste.

In October of 1998, Under Secretary of State Stuart Eizenstat remarked:

I believe very firmly that nuclear [power] has to be a significant part of our energy future and a large part of the Western world if we are going to meet these emission reduction targets. Those who think we can accomplish these goals without a significant nuclear industry are simply mistaken.

However, we cannot have this industry if we cannot dispose of the waste.

By passing sensible nuclear waste legislation, we have the greatest opportunity to reduce air pollution since the passage of the Clean Air Act. Nuclear power produces virtually no air emissions and generates an extremely small amount of solid waste. In fact, relative to the amount of power generated per ton of waste produced, nuclear power rates among the cleanest of all energy technologies.

My judgment, which has been formed over time, is that we have to develop policies which will encourage the future development of nuclear power in this country—not build roadblocks to its use. How can we continue to maintain 20-percent power production from nuclear plants if these plants are now going to reach an age where they will have to be closed down? What will we do? The only choice is to burn fossil fuel if we don't use nuclear power.

Currently, there are tons of spent nuclear fuel stored at 71 sites in 34 States around this country. Most of the spent

fuel is stored onsite at nuclear plants. The Nuclear Waste Policy Act of 1982 established a nuclear waste storage fund and required the Department of Energy to begin accepting nuclear waste from these plants all over the country by 1998. The fund was paid for by a user fee imposed on customers of electricity—that is, American citizens. That is, in effect, a tax on American citizens that has been paid for quite some time to store this nuclear waste.

To date, the fund has grown to over \$15 billion, as the chairman has pointed out. Not a single ton of spent nuclear fuel has been accepted by the Department of Energy. That is an outrage. As a result of the Department's failure to meet the 1998 deadline, the Department is currently facing multiple lawsuits which could cost the Federal Government—and taxpayers—tens of billions of dollars for their failure to produce a safe storage spot and make it available.

The Department of Energy has spent over \$4 billion to study the safety and environmental impact of storing spent nuclear fuel at Yucca Mountain site. That is \$4 billion. The general fund budget of the State of Alabama, with 4 million citizens, is \$1 billion. Four billion is a lot of money that has been spent.

The Department's findings indicate that Yucca Mountain is ideally suited for the long-term storage of nuclear power.

Despite the rhetoric put forth by those who oppose this bill, the fact is, Yucca Mountain is located in the heart of a remote Nevada nuclear test range where nearly 1,000 nuclear devices have been detonated and tested over the years during the cold war. It is a desert. It is not located near any population center and would pose no threat to the surrounding areas.

The safe long-term storage of spent nuclear fuel—which has no potential to blow up—is a problem we can and should have solved. By passing S. 1287, we will set in motion a well-researched plan to safely solve this problem once and for all and allow America to move forward in meeting our goals: Cleaning up the environment of nuclear waste and reducing air pollution by continuing to allow the nuclear industry to function.

The Clinton-Gore administration has suggested it may veto this bill if it arrives on the President's desk. The effect of this announcement is to frustrate a \$15 billion plan agreed to years ago.

To say “no” to nuclear power use in this country is to say “no” to our best chance to significantly reduce air pollution and save the environment. A vote against this bill is a vote against the environment, a vote against common sense and a vote against fiscal sanity. We have dawdled and delayed far too long. Now is the time to store this hazardous waste under a mountain, at an old nuclear test range in the Nevada desert, at Yucca Mountain.

I thank the chairman of this committee for his courageous, steadfast, and determined effort to bring this outrage to an end and to get this matter settled.

I appreciate his leadership, and I yield the floor.

The PRESIDING OFFICER (Mr. BURNS). The Senator from Alaska.

Mr. MURKOWSKI. Mr. President, I thank my friend from Alabama. He has highlighted some points that certainly needed to be identified. In reality, the issue is twofold.

No. 1, are we going to have a future in this country for the nuclear power generating capability associated with our power industry? Is that in the future of this country? Or are we hell-bent to kill it?

Further, do we want this high-level waste stored at 80-some-odd sites in 40 States for an extended period of time or do we want to get on with the job of collecting it and putting it in one permanent repository?

Listening to the debate, I am sensitive to the difficulties associated with the decision that was made at a time when we had a Democratic chairman of the Energy and Natural Resources Committee, my good friend, Senator Bennett Johnston. This has been a tough vote for my colleagues from Nevada. I recall a Republican Senator who probably lost the election in his State. He fought valiantly against putting the waste there. But, as I have identified time and time again, nobody wants the waste. That is the first premise with which you enter into this discussion. But you have to put it somewhere because it will not stay up in the air. As a consequence, we find ourselves still debating the issue.

At the hearing we had in the Energy Committee some time ago, the statement was made by our colleagues that regardless of the science, they would have to oppose the selection of a site in Nevada. Let's face it; that is a tough set of circumstances. But we have a job to do because we have to put it somewhere.

I do not want to oversimplify it. My friend said the bill is a lemon; it is ugly. I do not dispute that. But Nevada has been selected for the permanent repository, assuming it can be licensed. That is the hard fact. It might not be pretty. I guess I would say that we have, really, no other alternative because it is critical that we maintain a nuclear power industry in this country.

We have had a conversation about removing the take title. It has been removed. I know that disturbs my good friend and ranking member from the State of New Mexico. Secretary Richardson, the Secretary of Energy, raised this issue. I have held it in the legislation until the very end. But it became obvious that the administration could not deliver on their promises, that they could reassure the States that this was not just another ruse or another broken promise. And the broken

promises obviously go back to 1998 when the Federal Government did not deliver on its contractual commitments to take the waste. The administration simply could not assure the States that they would not become some 40 repositories, which is what they are now.

I know the Secretary of Energy did the best he could, but it simply could not be done. So it is quite natural these States would say: Wait a minute, the Federal Government has not performed on its contractual commitment. Now it wants to take title in our State, without giving us the assurance it is going to be moved. As a consequence, as my colleagues know, those States were represented in the letter I introduced into the RECORD from six States claiming they would urge their representatives in the Senate not to support legislation unless the take title was removed.

I do not fault the Secretary of Energy. But I think it is fair to say the administration has not had its act together for one reason or another. Maybe it is to accommodate my friends from Nevada, but, nevertheless, it has not been resolved.

I tried my best. I am willing to revisit this in the future if the administration can follow through with some type of commitment. But I think it is unfair for the administration to criticize legislation because of their failure to follow through on their commitment. That is where we are on this.

We have heard suggestions from our friends from Nevada that putting the issuance of a radiation standard off is politicizing the process. We can point fingers around here because this is a political body. But if we look at the facts, the opposite is probably true.

The administration chose to abandon sound science and to inject politics into the standard-setting as part of its opposition to the use of nuclear power. Under the law, the Energy Policy Act, the EPA was to follow the guidelines set by the National Academy of Sciences. The National Academy is not an appointed body. Its membership is elected, based on professional scientific background, by the other scientists. The National Academy called for “all pathways” as a standard.

EPA chose to go outside that guideline and threatened to create a separate groundwater standard in addition to the “all pathways.” I guess the only reason was to frustrate the development of the repository. They ignored science and yet injected politics. If anything, I think my amendment will remove politics from the process, and that is my objective.

Talking about whether or not this is environmental legislation, the Senator said environmental groups oppose this legislation and the League of Conservation Voters is watching every one of us. Think about that. Here is an environmental agency that is genuinely concerned about the safety, health, and welfare of people regarding issues it

has every right to be involved in. But what is its objective? Is the objective to kill the nuclear power industry in this country? Is that the true objective? I wonder. Because maybe the League of Conservation Voters, as they indicate their opposition to this legislation, indicating they are watching, thinks having spent fuel spread around this country at 80 sites in 40 States is a good idea.

I do not think so and I do not think the majority of Senators think so. Maybe they think shutting down 20 percent of our generating capacity is a good idea, when they do not come up with any alternative. What do they want us to do? Maybe they will ignore that we will have to replace that capacity with fossil fuel-fired plants. Is that what they want? They do not have to take the responsibility that you and I do, to come up with and address an alternative. It is very appropriate that they criticize, but I wonder where they are going. Are they really going to shut down the nuclear power industry? They do not say that.

Maybe they do not care about the cost to the taxpayers, the elderly, the poor, when we have to replace that capacity at the taxpayers' expense—the ratepayers' expense.

Maybe they do not have a better use for the \$80 billion, or whatever it is, in liability we are facing as a consequence of this delay. They have a responsibility to come up with answers, and they do not accept that responsibility. As a consequence, I find fault with their logic as well as their objective.

Maybe they simply do not care. Maybe they do not care about human health and safety or the environment or the cost and the impact on the taxpayers, the poor or the elderly, because they want to pursue their own agenda. Is that a political agenda? I think it is. It is a political agenda against nuclear power.

This is a major environmental bill, and if you are not for the environment in moving this quantity of high-level nuclear fuel to one site, how in the world can you suggest in any manner or form that you are for the environment by leaving it at these sites? It does not belong there. The sites were not designed for it. It is contrary to the health and welfare of the public.

What we have here is a progressive bill to address the problem. I say to those who receive threats or notification on the merits of the environmental aspect that this is not a good environmental bill, this is an environmental bill that addresses and solves the problem.

I conclude my remarks—since we are beginning to get statements from various groups that either oppose or support the bill—by asking unanimous consent that a letter dated February 8 from the International Brotherhood of Teamsters be printed in the RECORD.

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

INTERNATIONAL BROTHERHOOD OF TEAMSTERS, DEPARTMENT OF GOVERNMENT AFFAIRS,

February 8, 2000, Washington, DC.

DEAR SENATOR: The International Brotherhood of Teamsters urges your support for S. 1287, the Nuclear Waste Policy Act of 1999. Passage of this legislation is crucial to solving the ongoing problem of safe storage of spent nuclear fuel.

Thousands of tons of spent nuclear fuel are stored onsite at nuclear plants in approximately 110 temporary storage facilities in communities across the nation. No one disagrees that nuclear waste belongs in a single safe repository far removed from population centers. Yucca Mountain, located on the Nevada Test Site, which S. 1287 designates as the site, is just such a facility.

This legislation directs the Department of Energy to develop and operate a simple, safe construction plan for Yucca Mountain. The plan includes development of a safe transportation system from nuclear power plants to the site. We anticipate that this could support more than 10,000 Teamster jobs.

To ensure the safe and responsible handling of all phases of construction and management of the facility, as well as the transfer of waste to the facility, S. 1287 provides extensive training to all workers involved in the transportation of used fuel as well as to emergency response personnel. Specifically, the legislation requires the Department of Transportation, the Department of Labor and the Nuclear Regulatory Commission to develop an appropriate training standard, and goes the extra mile of ensuring that employers possess evidence of meeting that training standard before workers are permitted to remove or transport nuclear waste.

In addition, the legislation provides grants to organizations like the Teamsters Union to train workers who transport spent nuclear fuel. These training programs ensure that the high standard of safety that has been demonstrated in nearly 3,000 shipments of used nuclear fuel in the United States since 1964 will continue. The fact is that there has never been any human injury or environmental damage in the transportation of nuclear waste, and none of the sturdy nuclear fuel shipping containers has ever been breached.

Finally, the legislation supports programs to enhance road and vehicle maintenance and inspection efforts, all of which contribute to continued safe transportation of high-level radioactive materials.

For these reasons, the Teamster Union believes that S. 1287 is a well-reasoned, balanced approach to solving the on-going continuously growing problem of nuclear waste. We urge you to support it as it moves to the Senate floor.

Should you have any questions or need additional information, please contact Jennifer Esposito or me at 202/624-8741.

Sincerely,

MICHAEL E. MATHIS,

Director, Government Affairs.

Mr. MURKOWSKI. Mr. President, in paragraph 2, it states:

No one disagrees that nuclear waste belongs in a single safe repository far removed from the population centers. Yucca Mountain, located on the Nevada Test Site, which S. 1287 designates as the site, is just such a facility.

On page 2:

The fact is that there has never been any human injury or environmental damage in the transportation of nuclear waste. . . .

In the last paragraph:

For these reasons, the Teamster Union believes S. 1287 is a well-reasoned, balanced ap-

proach to solving an on-going, continuously growing problem of nuclear waste. We urge you to support it as it moves to the Senate floor.

It is signed Michael E. Mathis, Director of Government Affairs.

As we wind down this debate, I again urge we all focus on the reality of whether we want to kill the nuclear industry in this country, if that is the objective, or whether we want to get on with addressing the responsibility which we have, which is to address what we are going to do with this high-level waste.

Since we have been committed at the expense of some \$6 billion at Yucca Mountain, since we have in this legislation addressed the appropriate role of the Environmental Protection Agency as having the final say on the determination of what the radiation standards should be, since we have addressed the transportation system by leaving it up to the States to designate how and where and under what terms and conditions, the waste will move out of the States where it presently resides. We have met the challenge we have been charged to address. As a consequence, we should recognize that it is time to finally put this matter behind us and not contribute additional expense to the American taxpayers or the ratepayers who have been paying into this fund for the last several years.

I save the remainder of my remarks for the remaining time tomorrow where I understand the proponents and opponents have an hour equally divided beginning at 10 o'clock, with a vote scheduled at 11.

Mr. President, I yield the floor for comments by my colleague.

The PRESIDING OFFICER. The Senator from New Mexico.

Mr. BINGAMAN. Mr. President, I thank the chairman of the committee for his remarks. I will make a few remarks this afternoon. There will be more in the morning. I will be back on the floor in the morning to express it in more detail.

First of all, for anybody who is watching this debate and trying to understand what is happening, it is not easy to understand because we have a complicated set of procedures we have followed around here to get to this point.

Yesterday, I outlined my reasons for opposing the manager's amendment that was being considered at that time. It was No. 2808. That was the manager's amendment on which we voted to invoke cloture, or to bring debate to a close.

I said at that time I believed the overall legislation, not that particular amendment but the overall legislation, was very important and was necessary to solve particular problems we have with our nuclear waste program, but that the particular provisions in that amendment that was before us yesterday did not solve those problems and, in fact, the particular language in that amendment created some additional

problems. That was why I could not support the language we were considering yesterday.

We have, of course, gone beyond that. We now have a new substitute amendment which has many changes in it. It was my hope that when we got to this substitute, it would fix the problems and concerns I had. I commend the chairman of the committee for a number of constructive improvements he did make in this substitute. Unfortunately, though, my own view is that while the new substitute makes improvements, there are still serious flaws and, more important than that even, there is a major step backward, and that relates to the dropping of the take title provision. I will try to explain in more detail why I think the take title provision is important to us.

Let me also parenthetically say, I can sympathize with the statement the chairman makes about people who criticize and offer no alternative. Let me make it very clear, and I do not think this will be disputed by the chairman or anyone else, from the beginning of this process, I have not only expressed concerns, I have offered alternative language. In fact, when we were considering this bill in committee, I offered a complete substitute that was voted on by the committee and was defeated at that time but got quite a few votes. It is not as though we have refused to offer alternatives. We have offered alternatives. They have not been acceptable. I understand that. Each Senator votes their best judgment, and their best judgment was that the alternatives were not improvements. I disagree strongly with that judgment.

This new substitute on which we are getting ready to vote tomorrow morning—and we will, as I said before, have time to speak about it tomorrow morning; we will have an hour equally divided—eliminates the so-called take title provision which was the core of the committee-reported bill and was the focus of our efforts to reach a consensus with the administration.

Let me explain a little bit about what this take title provision is because that is probably not understood well by a lot of folks who have not spent a lot of time on this subject.

The Federal Government, particularly the Department of Energy, was obligated to actually take delivery of this nuclear waste that had been developed at these nuclear powerplants around the country by January 31, 1998. We had written that into the law. We said that is an obligation, the Department of Energy has to do it, and the Department of Energy entered into contracts with the various utilities around the country.

The map is not up right now, but every place you saw a dot on that map, there is a utility, and they have entered into contracts with the Department of Energy where the Department of Energy says: We will accept your waste at a particular time, and we will move it to a permanent repository.

We in Congress were way too optimistic, and the Department of Energy was too optimistic about how quickly they could do all this. They entered into these contracts. When January 31, 1998, came, the Department of Energy had no place to put this waste, so they defaulted on at least the first of those contracts. The contracts become due. The obligation of the Department of Energy to pick up that waste and move it to a site becomes due each year to more and more utilities as we move forward.

So today the reality is we have a bunch of lawsuits, lawsuits in the Court of Claims, by utilities against the Department of Energy, saying: You owe us money; you are continuing to be in default; you should have picked this waste up; you have not picked the waste up; for every day you don't pick the waste up, you owe us some more money.

That is the situation.

The take title provision was a provision we worked out with Senator MURKOWSKI, with the Department of Energy, and with my staff to solve that problem. Basically, what it said was that we would give authority to the Department of Energy to enter into a contract—if a utility wanted to—whereby that utility would give up title to the waste, the Department of Energy would take title to the waste, and that would be done as part of a settlement of the litigation that is presently pending or that would otherwise be filed.

We provided a particular length of time in which utilities would have to decide whether they wanted to enter into negotiations to do this, whether they wanted to take advantage of this. There was nothing mandated. But it was a way out of this morass of litigation in which the Department of Energy now finds itself.

This bill we are going to vote on at 11 o'clock tomorrow morning eliminates that way out. That way out was a main reason for actually considering this bill. It was the core reason our committee reported the bill in the first place. It was the core reason I thought it was important for us to go ahead and pass the legislation.

The new substitute still does preserve the Department of Energy's authority to settle lawsuits arising from its failure to meet its contractual obligations to begin accepting this waste in 1998, by reducing the fees they pay or providing other forms of financial relief. That is still in the bill. But the Department already has that authority. We did not need to legislate that authority again. I think it is clear to anybody who will study it for a little bit, it is not an objectionable part of the bill but it is an unnecessary part of the bill.

What the Department lacks, and what we were trying to provide in the legislation, and what would benefit the country, the taxpayers, the utilities—particularly the taxpayers, because the

taxpayers ultimately are going to wind up footing the cost of the judgments, whatever judgments are imposed on the Federal Government—but what clearly would benefit all of these groups and individuals I have talked about here is for the Department to take title to the utilities' waste and assume financial and legal liability for management pending the completion of the repository.

The truth is, Yucca Mountain is being characterized. It is not being done as quickly as we would like because we have not provided all the funds necessary to do it on a timely basis, but it is being characterized. If it passes muster in the final analysis, if it can meet the standards the Environmental Protection Agency establishes, and then is going to be used, it is still going to be 8 or 10 years from now before waste will actually be moved to that site. That is just the reality. It is not a question of whether you like it or dislike it; that is just the reality.

What we were trying to say is, during these 8 or 10 years, there is no reason why the Federal Government's liability for not moving that waste beginning in 1998 should continue to grow and to accrue. The new substitute drops that provision. The new substitute eliminates this way out for the Department of Energy, for the utilities, and, more importantly than anything, for the American taxpayers.

There are other provisions where this new substitute we will vote on tomorrow, like the original one, creates problems that would limit the ability of the Department of Energy's waste program to succeed. Let me mention a few.

The substitute imposes deadlines on the Department of Energy, saying the Department must ship spent fuel to Nevada on a schedule that the Department of Energy says they cannot meet.

I know that is what we did before. We set a deadline. At that time, the Department of Energy did not say they could not meet it. But at any rate, we set a deadline they did not meet and now we have litigation.

If we pass this bill, we are in danger of setting another deadline or another series of deadlines which this time the Department says they cannot meet—of course, prompting a lot of new litigation as a result of that. So it holds the Government and the taxpayers liable if the Department of Energy misses those deadlines.

There are also some broader issues affecting the program we have been unable to address in this bill that I think are important to consider. One example is Northern States Power's problem. This gets a little bit arcane, but I do not think too arcane.

Under Minnesota law, Northern States Power will have to shut down the Prairie Island nuclear powerplant in January of 2007 if the Department of Energy has not picked up Prairie Island's waste by that date. That is Minnesota law I just paraphrased for you. The manager's substitute could require

the Department to enter into a "backup" storage contract with Northern States Power to take the Prairie Island waste to Yucca Mountain so that Prairie Island can keep operating. The problem is, the Department of Energy will not be able to honor that contract by January of 2007, so the provision does not prevent the reactor from shutting down. The truth is, we have put in a requirement that the Department of Energy cannot meet.

There are also funding problems besetting our nuclear waste program. As I said yesterday, I think this is one of the most critical problems facing the Yucca Mountain program. The substitute does nothing to make the balances in the nuclear waste fund more readily available or even to make deferred payments for waste generated before 1983, the so-called one-time fee under current law available to the program. I believe this latter provision would not score under our budget rules since it is currently outside the 10-year scoring window. That is pretty arcane, but it is an important provision.

By dropping the take title provision and by failing to make this simple budget adjustment, in my view, the manager's substitute fails to capture and apply this important source of funds to the program when it is urgently needed.

None of us is ever 100-percent satisfied with any vote we cast here in the Senate. We all have to compromise, to give things away, to settle for less than a perfect bill. Senator MURKOWSKI has certainly shown his willingness to do that. I, too, believe I have done that and shown my willingness to make concessions on key issues—issues such as funding, on capping the nuclear waste fee, on potentially shifting the funding burden to taxpayers, conveying 76,000 acres of Federal lands to Nevada localities. These are all things in the bill that I have not thought were really appropriate, but I am certainly willing to compromise on them in order to reach agreement.

But as I look at the new amended bill on which we are going to vote tomorrow, and I try to weigh it in relation to the Nation and the taxpayers—what the Nation and the taxpayers of the country are getting versus what they are giving up—I find that the balance that is required for me to support the end result is not there. Legislators, as doctors, need to obey the rule: First do no harm. When I look at the substitute on which we are going to vote tomorrow, to my mind, it does more harm than good. Unfortunately, as a result, I will be compelled to vote against it.

Mr. President, I yield the floor.

Several Senators addressed the Chair.

The PRESIDING OFFICER. The Senator from Alaska.

Mr. MURKOWSKI. Mr. President, on behalf of the leader, in order to attempt to advance the process, for the benefit of everybody—

Mr. REID. If the Senator would withhold for me to make a brief statement,

while the Senator from New Mexico is on the floor, I would appreciate it.

Mr. MURKOWSKI. Go ahead.

Mr. REID. I thank the Senator.

While the Senator from New Mexico is here, I want to say I personally appreciate his hours of time, and the tens of hours his staff has spent—probably hundreds of hours—on this legislation. I am grateful to the Senator for the work he has put into this legislation and for the fairness he has demonstrated to the chairman of the committee and the Senators from Nevada. The fact that Senator BINGAMAN has done everything within his power to get satisfactory legislation passed should be spread throughout the RECORD. That does not mean the Senators from Nevada would be happy with it, perhaps, but I think he has tried to work on something that would bring a general consensus in this Senate and would satisfy the administration.

The Senator worked very hard to do that, and I commend and applaud his legislative abilities and constant fairness in this regard, keeping us informed, keeping the majority informed. I think it bodes well for the Senate to have the Senator as the ranking member and, hopefully, in the not-too-distant future, chairman of this very important committee.

The PRESIDING OFFICER. The Senator from Alaska.

Mr. MURKOWSKI. Mr. President, I shall not further debate the issue today.

Mr. DOMENICI. Mr. President, I rise to compliment Senator MURKOWSKI's leadership on the Nuclear Waste Policy Amendments Act. I appreciate his efforts to enable progress on the Nation's need for concrete action on spent nuclear fuel.

I find it amazing how fear of anything in this country with "nuclear" in its title, like "nuclear waste," seems to paralyze our ability to act decisively. Nuclear issues are immediately faced with immense political challenges.

There are many great examples of how nuclear technologies impact our daily lives. Yet few of our citizens know enough about the benefits we've gained from harnessing the nucleus to support actions focused on reducing the remaining risks.

Just one example that should be better understood and appreciated involves our nuclear navy. Their experience has important lessons for better understanding of these technologies.

The Nautilus, our first nuclear powered submarine, was launched in 1954. Since then, the Navy has launched over 200 nuclear powered ships, and about 85 are currently in operation. Recently, the Navy was operating slightly over 100 reactors, about the same number as those operating in civilian power stations across the country.

The Navy's safety record is exemplary. Our nuclear ships are welcomed into over 150 ports in over 50 countries. A 1999 review of their safety record was

conducted by the General Accounting Office. That report stated:

No significant accident—one resulting in fuel degradation—has ever occurred.

For an Office like GAO, that identifies and publicizes problems with government programs, that's a pretty impressive statement!

Our nuclear powered ships have traveled over 117 million miles without serious incidents. Further, the Navy has commissioned 33 new reactors in the 1990s, that puts them ahead of civilian power by a score of 33 to zero. And Navy reactors have more than twice the operational hours of our civilian systems.

The nuclear navy story is a great American success story, one that is completely enabled by appropriate and careful use of nuclear power. It's contributed to the freedoms we so cherish.

Nuclear energy is another great American success story. It now supplies about 20 percent of our nation's electricity, it is not a supply that we can afford to lose. It's done it without release of greenhouse gases, with a superlative safety record over the last decade. The efficiency of nuclear plants has risen consistently and their operating costs are among the lowest of all energy sources.

I have repeatedly emphasized that the United States must maintain nuclear energy as a viable option for future energy requirements. And without some near-term waste solution, like interim storage or an early receipt facility, we are killing this option. We may be depriving future generations of a reliable power source that they may desperately need.

There is no excuse for the years that the issue of nuclear waste has been with us. Near-term credible solutions are not technically difficult. We absolutely must progress towards early receipt of spent fuel at a central location, at least faster than the 2010 estimates for opening Yucca Mountain that we now face or risk losing nuclear power in this country.

Senator MURKOWSKI's bill is a significant step toward breaking the deadlock which continues to threaten the future of nuclear energy in the U.S. I appreciate that he made some very tough decisions in crafting this bill that blends ideas from many sources to seek compromise in this difficult area.

One concession involves tying the issuance of a license for the "early receipt facility" to construction authorization for the permanent repository. I'd much prefer that we simply moved ahead with interim storage. An interim storage facility can proceed on its own merits, quite independent of decisions surrounding a permanent repository. Such an interim storage facility could be operational well before the "early receipt facility" authorized in this Act.

There are absolutely no technical issues associated with interim storage in dry casks, other countries certainly use it. Nevertheless, in the interests of seeking a compromise on this issue, I

will support this Act's approach with the early receipt facility.

I appreciate that Senator MURKOWSKI has included Title III in the new bill with my proposal to create a new DOE Office of Spent Nuclear Fuel Research. This new Office would organize a research program to explore new, improved national strategies for spent nuclear fuel.

Spent fuel has immense energy potential—that we are simply tossing away with our focus only on a permanent repository. We could be recycling that spent fuel back into civilian fuel and extracting additional energy. We could follow the examples of France, the U.K., and Japan in reprocessing the fuel to not only extract more energy, but also to reduce the volume and toxicity of the final waste forms.

Now I am well aware that reprocessing is not viewed as economically desirable now, because of today's very low uranium prices. Furthermore, it must only be done with careful attention to proliferation issues. But I submit that the U.S. should be prepared for a future evaluation that may determine that we are too hasty today to treat this spent fuel as waste, and that instead we should have been viewing it as an energy resource for future generations.

We do not have the knowledge today to make that decision. Title III establishes a research program to evaluate options to provide real data for such a future decision.

This research program would have other benefits. We may want to reduce the toxicity of materials in any repository to address public concerns. Or we may find we need another repository in the future, and want to incorporate advanced technologies into the final waste products at that time. We could, for example, decide that we want to maximize the storage potential of a future repository, and that would require some treatment of the spent fuel before final disposition.

Title III requires that a range of advanced approaches for spent fuel be studied with the new Office of Spent Nuclear Fuel Research. As we do this, I will encourage the Department to seek international cooperation. I know, based on personal contacts, that France, Russia, and Japan are eager to join with us in an international study of spent fuel options.

Title III requires that we focus on research programs that minimize proliferation and health risks from the spent fuel. And it requires that we study the economic implications of each technology.

With Title III, the United States will be prepared, some years in the future, to make the most intelligent decision regarding the future of nuclear energy as one of our major power sources. Maybe at that time, we'll have other better energy alternatives and decide that we can move away from nuclear power. Or we may find that we need nuclear energy to continue and even ex-

pand its current contribution to our nation's power grid. In any case, this research will provide the framework to guide Congress in these future decisions.

I want to specifically discuss one of the compromises that Senator MURKOWSKI has developed in his Manager's Amendment. In my view, his largest compromise involves the choice between the Environmental Protection Agency or the Nuclear Regulatory Commission to set the radiation-protection standards for Yucca Mountain and for the "early release facility."

The NRC has the technical expertise to set these standards. Furthermore, the NRC is a non-political organization, in sharp contrast to the political nature of the EPA. We need unbiased technical knowledge in setting these standards, there should be no place for politics at all. The EPA has proposed a draft standard already, that has been widely criticized for its inconsistency and lack of scientific rigor—events that do not enhance their credibility for this role.

I appreciate, however, the care that Senator MURKOWSKI has demonstrated in providing the ultimate authority to the EPA. His new language requires both the NRC and the National Academy of Sciences to comment on the EPA's draft standard. And he provides a period of time, until mid-2001, for the EPA to assess concerns with their standard and issue a valid standard.

These additions have the effect of providing a strong role for both the NRC and NAS to share their scientific knowledge with the EPA and help guide the EPA toward a credible standard.

The NRC should be complimented for their courageous stand against the EPA in this issue. Their issuance of a scientifically appropriate standard stands in stark contrast to the first effort from the EPA. Thanks to the actions of the NRC, the EPA can be guided toward reasonable standards.

Certainly my preference is to have the NRC issue the final standard. But I appreciate the effort that Senator MURKOWSKI has expended in seeking compromise in this difficult area.

By following the procedures in the Manager's Amendment, we can allow the EPA to set the final standard, guided by the inputs from the NRC and NAS. Thus, I will support the Manager's Amendment.

I thank Senator MURKOWSKI for his superb leadership in preparing this new act. We need to pass this Manager's Amendment with a veto-proof majority, to ensure that we finally attain some movement in the nation's ability to deal with high level nuclear waste.

MORNING BUSINESS

Mr. MURKOWSKI. Mr. President, I now ask unanimous consent that there be a period for the transaction of routine morning business with Senators permitted to speak for up to 10 minutes each.

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

Mr. FEINGOLD. Mr. President, during today's debate on the nuclear waste legislation, I want to take my first opportunity to Call the Bankroll in the new year.

As we all know, nuclear waste has been a very contentious issue in past years.

I'm not here today to recap the arguments on either side, but instead to offer the public and my colleagues a picture of the money that has been spent by interests on both sides of the issue.

Of course the Nuclear Energy Institute is the chief lobbyist on behalf of companies that operate nuclear power plants in the U.S., and has led the fight for the nuclear waste legislation, in its various forms, that is now before us.

NEI gave more than \$135,000 in soft money to the parties and more than \$70,000 in PAC money to candidates in the 1998 election cycle.

In addition to NEI, a number of utilities which operate nuclear plants were also significant PAC and soft money donors in the '98 cycle, including:

Commonwealth Edison, which gave \$110,000 in soft money and more than \$106,000 in PAC money, and Florida Power and Light, which gave nearly \$300,000 in soft money to the parties and more than \$182,000 in PAC money to candidates.

Many of these donors didn't waste any time before donating in the current cycle either—NEI already reported donating more than \$66,000 in soft money, and Commonwealth Edison already reported \$90,000 in soft money donations in 1999.

On the other side of this fight is a coalition of environmental groups that has opposed this bill in its various forms, writing to members of the Senate last September to urge us to protect our country and our environment by voting against the Nuclear Waste Policy Amendments Act of 1999.

Among these groups is the Sierra Club, which gave more than \$236,000 in PAC money to candidates in the '98 cycle, and Friends of the Earth, which gave just under \$4,000 during that same period.

I also think it's important here to make a larger point that reaches well beyond the nuclear waste debate—that interests can exercise their clout not just through PAC and soft money donations but through yet another loophole in the law—phony issue ads.

Now it is very difficult to determine how much money is spent on phony issue ads. They are not reported under current law, and they should be. Nonetheless, some estimates have been made by news organizations and independent analysts. The Sierra Club spent an estimated \$1.5 million on issue ads in the '98 election cycle, and the Nuclear Energy Institute reportedly spent \$600,000 on issue ads in just two Senate races in the last cycle.

Now I can't say that even this is a complete picture of all the interests