

TITLE XVI—MISCELLANEOUS PROVISIONS
SEC. 1601. REIMBURSEMENT OF RESEARCH, DEVELOPMENT, AND MAINTENANCE COSTS.

(a) *IN GENERAL.*—Not later August 1, 2001, the Federal Crop Insurance Corporation shall promulgate final regulations to carry out section 522(b) of the Federal Crop Insurance Act (7 U.S.C. 522(b)), without regard to—

(1) the notice and comment provisions of section 553 of title 5, United States Code;

(2) the Statement of Policy of the Secretary of Agriculture effective July 24, 1971 (36 Fed. Reg. 13804), relating to notices of proposed rule-making and public participation in rulemaking; and

(3) chapter 35 of title 44, United States Code (commonly known as the "Paperwork Reduction Act").

(b) *CONGRESSIONAL REVIEW OF AGENCY RULE-MAKING.*—In carrying out this section, the Corporation shall use the authority provided under section 808 of title 5, United States Code.

(c) *EFFECTIVE DATE.*—The final regulations promulgated under subsection (a) shall take effect on the date of publication of the final regulations.

SEC. 1602. STUDY OF THE EFFECT OF THE BANKRUPTCY REFORM ACT OF 2001.

(a) *STUDY.*—The General Accounting Office (in this section referred to as the "GAO") shall conduct a study to determine—

(1) the impact of this Act and the amendments made by this Act on—

(A) the number of filings under chapter 7 and chapter 13 of title 11, United States Code;

(B) the number of plan confirmations under chapter 13 of title 11, United States Code, and the number of such plans that are successfully completed; and

(C) the cost of filing for bankruptcy under chapter 7 and chapter 13 of title 11, United States Code, in each State;

(2) the effect of the enactment of this Act on—

(A) the availability and marketing of credit; and

(B) the price and terms of credit for consumers; and

(3) the extent to which this Act and the amendments made by this Act impact the ability of debtors below median income to obtain bankruptcy relief.

(b) *REPORT TO CONGRESS.*—Not later than 2 years after the effective date of this Act, the GAO shall submit a report to the Congress on the results of the study conducted under subsection (a).

(c) *DATA COLLECTION BY UNITED STATES TRUSTEES.*—

(1) *IN GENERAL.*—The Director of the Executive Office for United States Trustees shall collect data on the number of reaffirmations by debtors under title 11, United States Code, the identity of the creditors in such reaffirmations, and the type of debt that is reaffirmed.

(2) *AVAILABILITY.*—Periodically, but not less than annually, the Director shall make available to the public the data described in paragraph (1) in such manner as the Director may determine.

The PRESIDING OFFICER. The Senator from Nevada is recognized.

Mr. REID. Madam President, I ask unanimous consent that H.R. 333, the bankruptcy reform bill, as passed by the Senate, be printed.

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

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT, 2002—Continued

Mr. REID. Madam President, it is my understanding that we are now back on

the energy and water appropriations bill.

The PRESIDING OFFICER. The Senator is correct.

Mr. REID. Madam President, I ask unanimous consent that the Senator from Vermont, Mr. JEFFORDS, be recognized to speak on the bill.

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

The Senator from Vermont.

Mr. JEFFORDS. Mr. President, I rise today to praise the managers of the energy and water appropriations bill for their commitment to renewable energy. I particularly want to thank Senator REID for his leadership in bringing additional funding to advance the cause of clean energy in this Nation.

Growing problems associated with fossil fuel energy use, including fine particulates and global warming, make it critically important that renewable energy play a much larger part in future energy needs.

Each year, the important role renewable energy should play in meeting our future energy needs becomes more apparent. This year 61 Senators joined Senator BINGAMAN and myself in requesting an increase for renewable energy in this year's budget. I am happy to say that this is seven more Senators than we had last year.

I am also happy to say that Chairman REID and Ranking Member DOMENICI provided almost \$60 million more than last year for renewable energy and \$160 million more than was requested by the administration. They recognize the importance of renewable energy and once again demonstrated their strong Senate leadership on this issue.

For many years, I have come to this Chamber to offer an amendment on renewable energy. This year is the second year in a row that I come to ask Members to praise—not raise—the renewable energy budget. This is a practice to which I could easily become accustomed to.

There is perhaps no better time to push these technologies forward. Our Nation is focused on energy issues unlike it was in the last decade. We are at crossroads where we can begin to see the end of the path toward a clean, sustainable energy future. Renewable energy is the most important landmark on that path.

Today, renewables are beginning to take hold. Our faith in these clean energy sources has not been without merit. Wind power, for example, is the fastest growing form of energy in the world. In the United States, my home State of Vermont is a leader in the use of wind power. My wind energy bill with representatives Blanchard and Mineta started this program in the late 1970's. Worldwide almost 4,000 megawatts of new wind energy capacity were added in the year 2000. This year will likely see a similar, if not larger increase.

Although much of that capacity was added outside the United States, many of the high-tech jobs needed to make that possible came from inside the United States. And as the use of wind energy goes up, the costs will only come down. The best news of all is that our own wind resources remain largely untapped.

Other forms of renewable energy—such as solar, biomass and geothermal—have the same kinds of benefits:

These technologies provided high-tech jobs for U.S. workers.

They help reduce acid rain and other forms of air pollution, including greenhouse gas emissions.

They are not subject to the kinds of supply changes that lead to large fluctuations in the price of fossil fuels and they help us reduce our dependence on foreign sources of fossil fuels.

This is good for the health of citizens and for the health of our economy.

I thank Senators REID and DOMENICI, once again, for their leadership on this issue. I will continue to assist in whatever way I can to ensure that the strong statement made by the Senate today will be included in the final energy and water appropriations bill.

Madam President, I yield the floor.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Madam President, I say to my friend from Vermont, there are a lot of reasons that we increased the funding for renewables, but there is no reason more than the diligence the Senator from Vermont has shown over the past several years on this issue. As a result of his tenacity, every year we have had to increase the funding in this bill.

Senator DOMENICI and I thought: We are not going to do this anymore. The Senator should know his handprints are all over this part of the bill dealing with renewables. But for his efforts, it would not be here.

I am a real believer in renewables. Any long-term energy policy we are going to have in this country will not be successful unless a large segment of it deals with renewables. I express my appreciation to the Senator.

Mr. JEFFORDS. Madam President, I thank the Senator for those kind comments, and I assure him I will continue to work to improve our situation in this regard.

I yield the floor.

AMENDMENT NO. 987, AS MODIFIED

Mr. REID. Madam President, there is a matter pending. The Senator from Michigan has a modification to her amendment to have the amendment accepted.

On behalf of Senator DOMENICI and myself, I send a modification to the amendment to the desk.

The PRESIDING OFFICER. Without objection, the amendment is so modified.

The amendment, as modified, is as follows:

On page 2, line 18, before the period, insert the following: “, of which such sums as are necessary shall be used by the Secretary of the Army to conduct and submit to Congress a study that examines the known and potential environmental effects of oil and gas drilling activity in the Great Lakes (including effects on the shorelines and water of the Great Lakes): *Provided*, That during the fiscal years 2002 and 2003, no Federal or State permit or lease shall be issued for oil and gas slant, directional, or offshore drilling in or under 1 or more of the Great Lakes (including in or under any river flowing into or out of the lake)”.

The PRESIDING OFFICER. The Senator from New Mexico.

Mr. DOMENICI. Madam President, I inquire of the Senator from Nevada, is this the amendment we worked out when we put in a quorum call?

Mr. REID. I say to my friend from New Mexico, that is right. Our staffs have done just exactly what we asked them to do.

Mr. DOMENICI. Not only do we not have any objection, but we think it is a good compromise and ought to be accepted. We will do our best in conference to retain it.

The PRESIDING OFFICER. The Senator from Michigan.

Ms. STABENOW. Madam President, I thank my colleagues and leader who are working so hard. I very much appreciate both Senator REID and Senator DOMENICI working with us to fashion a 2-year ban on any drilling of oil and gas in the Great Lakes, coupled with a study that would be commenced by the Army Corps of Engineers as to the environmental impacts of any future drilling.

I am very appreciative of the leadership on both sides of the aisle from our colleagues and their willingness to work with me to make sure the Senate language is adopted by the Congress in the conference committee.

I also thank staff who have worked very hard on this amendment—Sander Lurie, Noushin Jahanian, and my chief of staff, Jean Marie Neal—for all their hard work.

Mr. DOMENICI. Madam President, it is my understanding Senator REID was on the floor with reference to the amendment regarding the Great Lakes. It was his and my understanding we had agreed to that amendment. I think we stopped short of the magic words “agreeing” to it.

I indicate there is no further debate on the amendment, and we yield back all time.

The PRESIDING OFFICER. The question is on agreeing to amendment No. 987, as modified.

The amendment (No. 987), as modified, was agreed to.

Mr. DOMENICI. I move to reconsider the vote by which the amendment was agreed to and I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. DOMENICI. I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

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

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

Mr. REID. Madam President, we have the bill before the Senate and have recently accepted an amendment, and we have had a number of statements on the bill. Senator DOMENICI and I hope to move forward with amendments. I have spoken to the Senator from Idaho who has an amendment to offer, although he will not offer it this evening. We are waiting for him to offer that amendment.

Senator DOMENICI and I will be patient for the next little bit, but tomorrow afternoon if we do not have people offering amendments, we will move to third reading. It is not fair to everyone else. I say to my friends in the minority, they have been very anxious to move forward on nominations. We have the President's choice to lead his consumer safety board and we have agreed to go forward on that. It has been reported out of the committee. We have a time set for debating that nomination. That cannot take place until we finish this bill.

In addition to that, Senator DASCHLE wants to work on the Transportation appropriations bill. We have a number of things we need to do this week. We are not accomplishing them now. Part of it is not the fault of the minority or the majority who have interests in this bill. Part of the problem is having been interrupted by the bankruptcy legislation which takes our eye off the mark. We are back on it now and there is nothing to take us off this until we complete the bill.

We have submitted an unanimous consent agreement not on a filing deadline for amendments but, rather, a finite list of amendments. That is now being circulated. We hope that can be approved.

As chairman of this subcommittee and also the Transportation Subcommittee under the Environment and Public Works Committee, I spend a lot of my time thinking about and worrying about the State of our Nation's physical infrastructure. The American Society of Civil Engineers' 2001 report card for America's infrastructure gives the Nation's infrastructure a cumulative grade of D+. That is pretty low. The two prime reasons for the rating include explosive population growth, lack of current investment, and growing obsolescence of an aging system, identified as problems in California and in the Nation's decaying water structure. We have created some of the problems in Washington by setting, for ex-

ample, water quality standards that rural America simply does not have the money to meet. With these problems, our infrastructure is in a deep state of distress.

In Nevada, we are witnessing these problems on a daily basis. We have the most urban State in America. It is surprising to people when they learn Nevada is more urban than California, Illinois, Michigan, New York, and Florida. The reasons for that is 90 percent of the people live in the metropolitan areas of Las Vegas and Reno. Only 10 percent of the people live outside those metropolitan areas. However, in that 10 percent, it is very rural and it is an example of what we have in rural America.

The growth in the Las Vegas area has been phenomenal. We are having to build schools, roads, water systems, and all other basic infrastructure for modern life for the exploding population. We are having trouble keeping up. We have to build one school each month to keep up with the growth of school districts. We were the sixth largest school district a few months ago; we are now the fifth largest school district. There were 240,000 students in that school district, one new school each month. We hold the record in America for dedicating 18 new schools in one year.

The superintendent of education in Clark County where Las Vegas is located it not a superintendent of education; that person is a superintendent of construction. He spends a great deal of his time simply dealing with construction.

At the same time, smaller communities throughout rural Nevada do not have clean drinking water due to natural contaminants in the ground water. The costs for moving the contaminants is several times the annual budgets of most small communities. Flooding problems throughout Nevada continue to devastate lives and property. As I said yesterday, people wonder, how can you have flooding problems in Nevada?

The Senator from Washington, the Presiding Officer, knows the whole State of Washington is not like Seattle, but as you move east in the State of Washington it becomes much the same as some parts of Nevada. I don't know if it could be called desert, but it sure doesn't rain very much so the Presiding Officer understands what I am talking about when I talk about the fact that these rural, arid areas can suffer from real flood problems. It happens. When the rains come the waters come, and they cause all kinds of degradation to property and sometimes lives are lost.

Environmental projects are sorely needed when we restore the natural areas of our environment, not only in Nevada but all over the country. Our Nation's medium and large cities have

similar problems as well. Hartford, Atlanta, Chicago, and Richmond have antiquated storm systems that allow sewage and storm water runoff to be collected by the same system and sent to a treatment plant. During heavy rains, these systems are overwhelmed and raw sewage is dumped into our Nation's waterways.

Many of our citizens still live with the threat of flooding. Environmental restorations of degraded ecosystems are needed throughout our country. The infrastructure that makes up our inland and coastal waterways is really aging. The Corps of Engineers operates 276 navigation locks at 230 sites around the country. One hundred fifty of these locks are more than 50 years old. Nearly 100 of the remaining locks are nearly 25 years old. Most of these structures continue to perform as designed, but evidence of the need for reconstruction and modernization is becoming, very evident. Some facilities have reached their capacity and have reached the end of their design lives.

The Army Corps has been serving our Nation's infrastructure needs for more than 200 years, primarily in the areas of navigation and flood control. While some may quibble with individual projects that Congress instructs the Corps to undertake, no one can question the value that the Corps has historically played and continues to play in our Nation's development. However, we are slowly but surely strangling the Corps and our Nation's infrastructure to death with our fiscal inattention.

Financial shortfalls year in and year out in the water accounts of the Army Corps have now resulted in the backlog of \$40 billion in authorized projects. They are awaiting the first dollar of funding; \$40 billion of authorized projects have yet to receive their first dollar of funding.

This shortfall just takes into account the Corps' historic missions of navigation and flood control and does not take into account some of the new directions Congress has pushed the Corps in recent years. It is wrong to give short shrift to important components of our Nation's infrastructure. Flood control projects protect human lives and property. Navigation projects ensure that our Nation's economic engine continues to hum.

We have received some criticism in this bill that we spent too much money on dredging, having water areas made clear so dredges can come up and down. There are examples given that a lot of these projects that we have, there is not much commerce moving. But think what it would do if we did not have this barge traffic. It would only add to the trains that are already overwhelmed. It would only add to the number of trucks, and in my opinion there are too many of them on the roads anyway. So we have to understand that these projects are important.

In the western United States, the Bureau of Reclamation is facing similar issues as the Army Corps, an aging inventory of projects and a shrinking budget. Many do not realize Reclamation has been around for almost 100 years. Next year will be the 100th anniversary of the first ever Bureau of Reclamation project. It took place in Nevada. It was the Newlands Project named after the Nevada Congressman and it was to supposedly make the desert blossom like a rose.

A few problems developed as it was blossoming. It dried up one river. Lake Winnemucca is as dry as this table. Pyramid Lake is beautiful. There are only 21 lakes like it in the world, desert terminus lakes. We have two of them in Nevada. It almost dried up, but it is now on the road to recovery because of actions taken by this Congress to reverse some of the bad parts of the Newlands Act. But the Army Corps does the best it can, as has been said, with the tools it has.

The Newlands Project has done good for Nevada but also bad. We have to keep changing these projects. I cannot imagine what this part of Nevada would look like today without what has happened with water, but I can imagine what it used to look like with water going into these two lakes, one of which is now dried up.

Still, we continue to underinvest in both of these agencies. The need for water for municipal and industrial uses is not declining. The need for flood control is not declining. The need for a modern navigation system to transport products to market is not declining. Yet the budgets of these two agencies seems to continue to dwindle.

For example, I talked about the Newlands Project. One hundred years ago, people were enticed to come there. We said: This is going to be great for you and generations to come. People did come there. They have been farming for generations. Now the Federal Government has interfered, causing a disruption in their lives. It is not the fault of the farmers, but certainly the people who put in these reclamation projects did not understand what the full brunt of these programs would be.

So I repeat, we need to go back. We need to go back and review and change some of these projects. We have not had the money in the past to do that. We still don't. As I have indicated, we continue to underinvest in both of these agencies.

The need for water for municipal and industrial uses is not declining. The need for flood control is not declining. The need for a modern navigation system to transfer products to market is not declining. Yet the budgets of these two agencies continue to dwindle.

Public investment including authorization for water infrastructure in 1960 amounted to 3.9 percent of the gross domestic product. Today that figure is

down to 2.6 percent, approximately. That may not sound like much of a change, but let's look at the Corps during that period.

In the mid-1960s, the country was investing \$4.5 billion annually in new water infrastructure. Today, it is less than \$1.5 billion. That is a significant change. From 1960 to now, we have gone from \$4.5 billion to \$1.5 billion. Our water resource needs are no less today than they were 40 years ago; They are more. Yet we are investing one-third as much.

One major impact of that reduction is the increasingly drawn out construction schedules forced by underfunding these projects. These artificially lengthened schedules cause a loss of some \$5 billion in annual benefits and increase the cost of these products by some \$500 million.

When many of these reclamation projects came into being, the main, the only intent was for agricultural purposes. Over the years, it has been found that some areas are very interested in these reclamation projects because of the recreation aspects of them. People like to water ski. They like to fish. They like to boat. They like to have picnics on the beach. Now they are competing with these farming projects. We need to go back and take a look at them.

These artificially lengthened schedules cause the loss, as I have indicated, of some \$5 billion in benefits, either agricultural or recreational, and increase the cost of these projects by some \$500 million—and that is each year. Failure to invest in maintenance, major rehabilitation, research and development, and new infrastructure resulted in the gradual reduction in the value of our capital water resources stock and, in turn, the benefits we receive.

The value of the Corps' capital stock peaked in 1981 with a replacement value of \$150 billion. Today its estimated value has decreased to \$124 billion. We need to reverse this trend. Public infrastructure is too important to our lives.

Federal waterway projects, including ports and inland waterways, handle more than 2.2 billion tons of our Nation's cargo, valued at more than \$660 billion. As I said before, we could try to put that on trains, on trucks, on airplanes—2.2 billion tons of our Nation's cargo. I do not think that would be a good idea.

These waterways generate more than 13 million jobs, and Federal taxes collected at ports generate more than \$150 billion a year. Federal flood control projects prevent more than \$2 billion per year in damages, and my being from Nevada, I can vouch for that. Even though Las Vegas gets 4 inches of rain a year, the flood control projects probably save hundreds of millions of dollars more than that in property damage, loss of production, and certainly in lives.

Federal flood control projects prevent more than \$2 billion per year in damages. Recreation provided by Federal water projects provide more than 500,00 jobs and provide recreational opportunities to more than 10 percent of the U.S. population. Water stored at Federal projects provides more than 250 million acre-feet of water for municipal, rural, and industrial users.

How much water is that? Las Vegas with 1.6 million people uses just a little more water than that. Two-hundred and fifty million acre-feet of water is stored at Federal projects. That is important.

Finally, Federal water projects provide nearly 30 percent of our Nation's hydropower or about 4 percent of our total electric capacity. In the west, Federal hydropower project provide an even higher percentage of the total electric capacity—as we have recently learned with the California energy crisis.

Public water infrastructure is the only Federal program that is required to be analyzed on a strict benefit to cost basis. The water infrastructure provided by the Army corps alone provides an annual rate of return of approximately 26 percent. The steam of benefits are realized as flood damages prevented, reduced transportation costs, electricity, recreation, and water supply services.

Society's values are increasingly emphasizing sustainability and ecological considerations in water infrastructure management and development. Like most people, I support these considerations.

The Army corps and reclamation expend nearly a quarter of their annual budgets on environmental projects. These ranges from major restoration projects such as the Comprehensive Everglades Restoration, to smaller projects, such as oyster recovery efforts in the Chesapeake Bay. Both agencies will continue to meet the nation's challenges in this arena.

As you can see, I am one who firmly believes that investments in our nation's infrastructure more than pay for themselves through improved productivity and efficiency. To ignore these needs in the short term is going to cause us problems over the long haul.

All of this is to say that we, as a body, need to think about the state of our nation's infrastructure comprehensively and soon.

Our physical infrastructure sustains our way of life, so we must sustain it.

We are here today to discuss energy and water matters, but, in the next few weeks, I hope to come back to the floor to discuss our nation's transportation infrastructure, another area of concern.

Before I close, I want to say some words of praise for the Federal employees and contractors that populate the departments, agencies, and other orga-

nizations that are funded under this bill.

Members of Congress are frequently critical of Federal agencies and departments, particularly ones where we have an oversight role. As I mentioned earlier, I have been a frequent critic of the Department of Energy.

But I have said that I think things are greatly improving as a result of some work done by Senator DOMENICI and some of his colleagues.

None of that is to suggest that I, or any other Member, am anything other than proud of the hard work and accomplishments of our Federal workforce, including, contractors, lab employees, and others that make these important organizations run.

I invite everyone who has the opportunity—as I have had—to go to the Federal Laboratories and some of our test sites where they have done things relating to the cold war—places where Federal employees are in love with their jobs. They spend long hours with little recognition. Many of these agencies, such as the Corps of Engineers, the Bureau of Reclamation, and Department of Energy, that we fund in this bill I think do a wonderful job. I have very few criticisms of the employees. There is a tiny fraction—as in any organization—that tries to cause trouble to the whole organization, but as far as I am concerned, they haven't succeeded.

I throw a bouquet to those entities funded within this bill, and I am very proud of working with them. We expect a lot of these organizations. With very few exceptions, they live up to all of my expectations and the demands we impose on them. I think they serve our Nation with distinction. I think I speak for Senator DOMENICI when I say we appreciate all the work they do.

My friend from New Mexico has been very patient with me. We are waiting for somebody to come and offer the next amendment. The floor is open. This is a good time to do it. After 5 o'clock, we are happy to work, if the leader wants to work awhile tonight. But because I think we are not coming in until 10:30 tomorrow because we have a special order in the morning dealing with our dear friend, Paul Coverdell, we are not going to be able to start on this bill until 10:30 in the morning. I hope we can get some work done tonight.

I repeat that we are not going to be able to go to the nomination until we complete this bill. There are, I believe, 7 hours on it. All that time probably won't be used. But then we have the Transportation appropriations bill on which we need to also work this week. I hope Members will come and help work through this bill. If there are problems, tell us. We have had a number of Members come to us during the vote—some Democrat—and we have been able to recognize what the prob-

lems are, and we have been able in most instances to satisfy the problems.

The PRESIDING OFFICER (Mr. DAYTON). The Senator from New Mexico.

Mr. DOMENICI. Mr. President, I thank the Chair.

Let me say to the Republican Senators that it is important you begin to tell us what amendments you have. Obviously, we haven't been on this bill very long. For anybody who thinks we are wasting time, when you consider all the time we took off this bill to do other things, we have been on it only a few hours. This is a serious bill with a lot of serious issues.

Once again, we are hopeful that Senators will be able to come up with amendments. If in fact we can't complete that list this evening, we will do our best, and we will inform the distinguished chairman of our best efforts. For now, I once again ask if you have amendments, let us know through the Cloakroom. We can start listening. I think we only have a few at this point. We have specifically requested amendments on our side.

I do not know about our distinguished friend, the chairman of the subcommittee. Have you begun to accumulate a list? Is it small like our list?

Mr. REID. Yes. We are getting our Senators to tell us what amendments they want to offer. That is also being done on the other side. Hopefully, within a short time we will have at least a finite list, and hopefully we will be able to work through that. Of course, our very able staff will work through them also. I hope we can have that done pretty soon.

Mr. DOMENICI. Thank you.

Mr. President, let me proceed with some discussion while we wait for the activities and desires of our Senators, both Democrat and Republican.

First, I want to make a comment about the President's energy policy. Then I would like very much to talk about the future in terms of the economies of the world, prosperity and growth, and how it is related to energy, and how I see that future compared with others.

First, let me talk about the President's energy policy. It is contained in notebook form. For anyone who wants to read it from cover to cover, it is a cover-to-cover approach. It covers almost every issue. They have assessed almost every kind of energy and conservation issue that I believe has been in or around Washington, or anywhere in this Nation. They have begun to list what our energy needs of the future are and to come up with them in a rather basic way to let people challenge what we need in the future. That is all well and good.

But essentially, I would like to make a point that has not been made very often. If you look at the whole policy on energy that the President submitted

to us—which was worked on for weeks on end by the Vice President and a distinguished staff, some of whom used to serve us here in the Senate—let's talk just a bit about how much new energy we are going to need out to 2020. They worked on it with economic experts, with projectors of growth, and with those who could estimate the electricity needs of our country for certain episodes during the next 20 years.

The conclusion was that the current ratio between energy demand and the gross domestic product might remain constant. Now gross domestic product is what we all reference to measure how much growth we have and how much we grow is measured as an addition to gross domestic product. When it is growing over a sustained period of time at a powerful rate, in America we equate that with prosperity, with jobs, with more opportunity, and higher pay for those who are not earning so. I don't think they have estimated the gross domestic product increase for the next 20 years at any exceptional rate, but rather sustained—something like blue chip experts estimate.

In doing that, we concluded we would need 77 percent more energy in 2020 than we are producing today.

If we drew a pie chart of a certain size which showed how much we are using today and then drew one around the outside, you would add 77 percent. Or you could take 2020 and draw one big pie. Then you would show a piece of it that is current needs and another piece that is future. In any event, the piece that is future needs would be 77 percent more than we are using today.

Most interesting, this national energy policy recommends conservation and efficiency measures that would reduce that increase by over half, resulting in us only needing to produce 29 percent in real energy additions.

The rest of it would be made up by enhancing and increasing our conservation and our efficiency. And there are numerous examples there on how you would increase efficiency, which equals a lot of research on products that will use less, on conservation. All kinds of things that we have already learned to do and are doing well, we would do more and do better.

Frankly, the President and some of the President's spokesmen may have started off talking about supply. We might have gotten a little bit excited about it. Some people in the country asked: What about conservation?

Well, I am just recalling, when it is all finally done, this is what it is: 77 percent new energy need; only 29 percent of it with new powerplants. They may use natural gas, which seems to be almost the singular source of every new powerplant in the country, and that can't continue forever. We will have to do some others. There's not been many new coal-burning powerplants, even though we are applying

clean coal technology and, yes, not a new nuclear plant for two decades or so. But everything is moving in the direction of "let's do it better." Let's do it more efficiently; let's do it cleaner. And let's permit America to grow.

That is for starters. I am not changing any of that when I speak of this bill being a very good start in implementing an energy policy that moves us in the direction of diversity of energy, not just one kind; diversity so there is competition; diversity so that, in fact, you can address some overarching issues such as ambient air pollution that produces global warming.

We ought to be able to address some of those issues in our future thinking, because they are caused by certain types of energy being used to produce our energy supply, by kinds that produce the carbon dioxide and other things that go into the atmosphere and cause pollution. What if we can produce energy that causes little or none of those gases or much less of those. You can understand that clearly we don't have to be worried about global warming to the extent that we reduce the very essence of global warming pollutants in the basic supply of energy for electricity in our country.

Obviously, we are not talking as much about automobiles and their pollution here, but clearly, it is a very powerful thing to just look at the electricity needs and see if we can do that in a way that truly helps us with reference to global warming instead of hurting us.

There are a lot of people around that say there is a Kyoto agreement and we should follow it, even though the Senate voted about 2½ to 3 years ago, 95-0, that the Senate would not ratify the Kyoto agreement if they sent it to us. It seems to me every time we get in this debate in this country and the President is talked to about Kyoto, or for those who argue with him overseas, nobody even brings up the subject: "What about the Senate which voted 95-0 that we did not want to enforce that kind of program because it would put too much pressure on our future in terms of prosperity and, yes, indeed, may put a lot of pressure on countries that truly need to build new electric generating capacity so they can prosper."

What I am suggesting is, this bill moves in the direction of what we might very well call "beyond Kyoto" or what we may call "prosperity beyond Kyoto."

I will go through some of the very exciting things that are done in this bill that permit us to move in the direction of having a mindset beyond the Kyoto agreement, having a mindset for great prosperity for the underdeveloped countries and the developed countries in terms of being able to use energy for growth and prosperity without concern about global warming.

This is a pretty big vision, a pretty big idea, but frankly, I believe America should do it. I believe our President should take the lead.

I will go through a few things we are doing here and then fit them into a wrap-up as to how that could be America's vision beyond Kyoto.

First, the renewable energy programs in this country have made great strides in terms of innovation, proving concepts, but today it is still a very small portion of the energy production in our country. We ought to do what we did in this bill—increase our focus on renewables, ask that more be done in that area, and that it be part of a great inventory of potential products for this "beyond Kyoto" idea.

In this bill we made a good start. We funded renewable programs to the tune of \$435 million. This is not legislation saying we shall have solar and who will do what. It just says we have these programs going, the Department of Energy shall manage \$435 million during this year for the various renewable programs we have. That is 16 percent higher than current levels. There is no question that if we keep the pressure on and have a broader vision, this would be part of what we can do better. We can impose on that kind of technology to do more.

Then there are hydrogen-based technologies. Some think the world ought to be on a hydrogen diet for energy in the not too distant future, and some think it could be the basis for future growth projections. I am not quite there yet, but clearly it belongs in the equation. We have added about 30 percent to the research in that area.

This might end up decreasing our use of petroleum products in transportation, even though our basic agenda here is not with reference to the automobile and the internal combustion engine and the like. That research is largely being moved ahead in another appropriations bill.

High temperature superconductivity is important because it causes us to waste a lot less electricity as you run the electricity down the lines. Superconductivity would make it such that you would lose very little, if any, a very dramatic step forward. We have increased that about 20 percent, hoping that our great scientists can move into superconductivity and capture some of the waste that now goes into transmitting electricity—an exciting kind of idea.

Geothermal: We know there is a lot of it out there. We have added some research money, although we have been doing this for many years; that is, spending money on this system. We think we should try harder and do more.

Wind systems: They are already in existence. Now I am not one who thinks that wind energy can be as big a component of the future as others,

just because I have observed what we currently do and I can't visualize doing 10 times as much or 50 times as much. But in any event, we said let's proceed with a little more dispatch.

And then on the side that we would call nuclear: The problem is that when you say nuclear power, people think of driving by a nuclear powerplant. Incidentally, you don't see any smoke come out of the chimneys because there is none. You don't see any pollution because there is none.

The spent fuel rods are inside that machine, and to the extent they are not careful with those, that creates some source of problem for human beings. But these are gigantic nuclear powerplants. They are almost all of one type. It is amazing how the American people, over the last 15 years, have grown more accustomed to driving by them and living with them, such that today in America there is a willingness to take another look at nuclear.

I know as soon as we take another look there will be those who would like to blindfold us right now and say: "Stop that. It is terrible, bad for everything."

Let me tell you, it is not bad for global warming; I will guarantee you that. If any group of environmentalists are really committed to solving the problem of global warming, let them at least listen to a proposal that would bring the world into contact with a new generation of nuclear powerplants. We might be able to set a goal for 10 or 15 years from now when we would be diminishing the pollution that would be commensurate with that growth, as far as global warming is concerned.

Why should that be dismissed when it is that profound and gigantic a potential? Why would we dismiss clean coal, moving it to the furthest level of cleanliness, even if it costs a lot of money to do the research? Why would we say that would not work? What are we supposed to live on?

Right now, people would say: Your State will continue to flourish, Senator DOMENICI. Natural gases will do it. New Mexico is the fourth largest producer, and it is going up and away. Every new powerplant we have heard of, including the three in New Mexico—that won't be for our people but for somebody else—will be built with natural gas, as far as we know. We didn't have any for many years. The price is causing people to invest in natural gas. For the long term, you need natural gas, but you also need some other things.

What does this bill do about nuclear? Well, first, there are some very significant increases and some very interesting approaches to keeping this option alive. For the 21 percent that we already get from nuclear power today, we need to make sure we don't close those plants down prematurely but continue them for their entire useful life and do what we can to make sure

that transition is smooth, functional, and safe.

Now, let me go through some of the things we are doing to create this option. This bill pushes nuclear power forward with the following initiatives: \$19 million for university research reactor support—that is a \$7 million increase—to make sure our country has the educational resources necessary for an economy that continues to rely substantially on nuclear power—the old ones plus new ones. After all, we came up with this technology. Some of our great companies built these powerplants. They are all over the world, although we didn't build all of them in foreign countries.

Seventy-eight percent of France's electricity comes from nuclear power. If you tell people that, they say they don't believe it, or so what? Well, they have a lot less problems with greenhouse gases than we do—sufficiently less that Mr. Chirac can lecture our President about it. That is pretty interesting. If we had 68 or 70 percent of our electricity from nuclear plants, we might be lecturing him. But we don't; we have 21 percent. Germany has around 35 percent, and Japan is building new ones—in fact, as we speak, they are building new ones.

The United States is sitting on this problem of not having enough energy so we can maintain our prosperity in the future. We say our universities used to be the pride of the world in terms of creating nuclear physicists and design engineers who worked in this field. All of the universities, except a few, have dramatically reduced these programs and are very excited about building some of this back into their programs through intramural-type grant programs, where they can do research and learn these particular scientific professions.

There is a \$4 million increase in a program to improve the reliability of our 103 existing nuclear powerplants. Let me suggest another thing that is little known. While we had some brownouts in California and some shortages elsewhere, they were minimized because the Nuclear Regulatory Commission and the nuclear powerplant industry in America had been working so well together, and the licensing process and the regulatory processed worked so well during the last decades, that more energy was produced by the nuclear powerplants by upping their capacity in total safety, such that, on average, they increased by the equivalent of 22 new powerplants. Nobody knows that, but that happened.

So while we are looking around for new sources, these licensed facilities, getting up in years, ratcheted up a bit and produced the energy equivalent of 22 new nuclear powerplants on top of the 100-plus we have in the United States.

This bill continues with an increase of \$7 million for a total of \$14 million, in an area which is very exciting. I hope it will be used prudently. In fact, I hope it will be used to join with partners in the world to produce something really important. This is for the next generation of nuclear reactors. Some people call it generation IV reactors. There are a couple of them in the design stage today, and some people have read about them. They are very exciting new technology.

They are going to produce nuclear reactors that are passively safe. That means that their makeup, in terms of the physics, is such that they can't melt down. They will not have a melt-down possibility in the generation IV reactors that will be produced. In addition, they will have much less left over, much less unused, enriched uranium, so there is much less risk. This reduces greatly the proliferation concerns, with reference to the byproduct from the reactors.

This bill also addresses the Nuclear Regulatory Commission—which, incidentally, has been doing an outstanding job. The chairman now is a Democrat appointee. We urged the President to keep him on. He has been so exciting and powerful and such a force in terms of leading that Nuclear Regulatory Commission in the right direction toward the safety and well-being of our people, and maintaining the essence of our nuclear industry. We hope he is going to remain as the chairman. Now, I don't think I was saying anything out of school there. I think the chairman knows what is thought of him. I think I may have indicated that he is going to stay on and he wants to stay on.

Remember, just a few years ago we didn't have any money in these programs that I am talking about. We decided it was best to have an Energy Department for this great United States. But back then, when you walked in the door, what we wanted was no nuclear energy and nothing nuclear in the Department of Energy for the greatest nation on Earth. That is the end to which we had gone in terms of our anti-nuclear-power sentiments. I am not exaggerating; that is a truism.

I was fortunate to be chairman of the subcommittee for 6 years. My good friend was ranking member part of the time—Senator REID. We started to build a little bit of nuclear energy capacity back up, so that now they are no longer ashamed. Obviously, they have divisions and departments that are doing nuclear work, so they can't hide anymore. I think they are very forward-thinking about it.

But just remember, with generation IV we are not talking about the kind of reactors we have now, although they are pretty safe and people now are excited about how clean they are.

The only thing people who oppose nuclear power are saying is: What about

the waste that comes out of them? We are doing well when we can produce energy that will no longer cause any global warming, but we have a problem of how do we get rid of the waste. Just think of this. What is the dimension of this problem?

I want to speak of it in physical dimensions. A football field—you have a number in your great State, Mr. President. A football field 12 feet deep is the waste problem of America. That is how big it is. When people scare us to death about it, the truth is, it is just a matter of human beings deciding with technical excellence, engineering expertise, and resources what to do about that. You can either bury it, put it away for an interim period of time, or change it from its current form to another.

In Europe, they are not in a hurry to bury it permanently. They are doing other things with it—interim storage—and they are moving ahead with other technologies to make the end product far less toxic.

This bill says we are not going to fund Yucca Mountain, the permanent repository, as much as we have in the past. Although we will go to conference, where the House has a higher number to keep it going. We will have that debate in conference, and we do not always win every nickel and every penny. So we are looking forward to going to conference and seeing what can be done.

There are two other technologies that are right there ready to go. One of them is called accelerator transmutation. This is very exciting new technology, proven out beyond the experimental stage, and we have \$70 million to continue the work.

It is an accelerator, therefore it is not a nuclear reactor, that will change what high-level waste is as this accelerator does its work on the waste product. Ultimately, just to make it simple, what it will produce is a residue that instead of having a half-life in the neighborhood of tens of thousands of years, the residue will have a half-life in the neighborhood of 700 years. After 300 years, it would be no more dangerous than uranium ore from the ground.

If we can get a byproduct like that, there is nobody who would stand up and say we cannot handle that. What is difficult to handle is proving modular-wise and scientific-wise what will happen 10,000 years from now when we put something underground and leave it there. That is what makes the problem and the job for nuclear power of the future a difficult one. I repeat. We are singularly the only country saying let's put it underground and forget about it forever, when it has only used up 5 percent of its energy. Ninety-five percent of the energy is still in the rod that you put in the ground.

So true and so powerful is that statement that you cannot talk to the Rus-

sian leaders at any level about energy. You cannot talk to any of them about getting rid of the waste product in any way other than using it, which is amazing. As a matter of fact, they just put out word the other day that if we are so frightened about the waste product, they would accept it. Nobody is seriously thinking about that, although maybe some are. But it just shows you the difference, the mentality between those who have worked that problem in Russia. Some of them learned from us; we learned some from them.

They had the greatest nuclear scientists; we had the greatest. We never did decide who had the best. They both had so much respect for each other in nuclear weaponry; I think that kept us from ever having war. You can bet the greatest scientists working on our nuclear weapons knew exactly who the greatest scientists were over there. And they were the greatest. They were not just getting a degree in physics and going over and taking on a program. They were fantastic people. That expertise has come down to nuclear reactor waste and they understand it. They even moved to the next generation of nuclear power, breeder reactors, which we have become so frightened about that even Senator DOMENICI does not talk about it. So we moved to an interim discussion of the kind of nuclear reactors we are talking about today.

We have transmutation, a big word which means changing the makeup and content of this product into something far less toxic.

Incidentally, it has two other uses that are very positive that come out of this accelerator process, one of which is to produce all the radioactive isotopes you need for the medical programs of the country. One of these major accelerators would provide all you need.

Plus another use that is rather significant would be to back up our tritium production; it will do that, too. We are currently going to use reactors to do that job. Under Secretary of Energy Bill Richardson we decided to do it down in Tennessee at one of their TVA nuclear reactors. So that is where the tritium in the program will be produced. This could even be a backup for that reactor in the event we moved ahead.

Some people talk about the estimated costs of transmutation. They use the numbers wrong because the total number over a long period of time, when they tell you how much that is, does not take into consideration how much electricity it produces. It is just telling you what it costs. That would be like saying the next 10 nuclear powerplants, my gosh, are going to cost \$1.5 billion each, but you don't know how much electricity it produces. You just hold to the \$15 billion number.

Let me emphasize I want to stop using the word "waste" and use "spent

fuel" because I just gave you an example of how much of the energy is still in the spent fuel. It is 95 percent. It is still energy that can be used. As long as we have cheap uranium, it is obvious we are not going to go full speed ahead to produce byproducts that cost a lot of money. In the process we do know these are some of the approaches to making sure we have options in the future.

To wrap up the vision, the vision is to take these resources and others the administration might need to ask us for and produce a commitment by the United States of America, led by our President, to put together a 10-, 15-, or 20-year plan that says "beyond Kyoto" and say to the world: "Let's bring together the electricity-producing resources we have been discussing—renewables, biomass, clean coal, nuclear—let's bring them together and decide in a scheduled approach to begin to produce them so that we can begin to use them in the world without any effect on global warming.

It is very doable. We ought to be excited about it. It means this problem in America might have brought out the best in us. We may be able to tell poor countries with these new reactors that we can put one in every country. They will be very small. They will be modular in size. Perhaps they will be 50 megawatts each instead of 1,000 megawatts. Perhaps they have the characteristics I described here. But let's set the world under our leadership to working on these kind of criteria and then develop the science and technology with our businesses and other countries to do it.

I have asked the President to think about this. I call it now "reaching beyond Kyoto," but it may be "prosperity in abundance for everyone post-Kyoto." It may be an equal title because if, in fact, we have to restrain the growth substantially because the energy source is polluting and thus causes some problems with reference to global warming, then it is an admission that other people cannot become as wealthy as we are; that they cannot have as many things as we have.

We constantly remind the world how much energy we use, and, yes, we do; we use more than any other country. We use maybe 25 percent. But this little country, America, also produces about 25 percent of the gross domestic product of the world, too.

We have a chance to reach beyond this bill, beyond the discussions about an energy policy in detail with reference to each of these different things on transmission lines, using the public domain for more gas and oil, and to set a goal beyond all of that which would say to the United States and the world: You can almost pick your resource because if you do not have any coal, you can use uranium; you can use these new fourth-generation reactors. If you

have coal, we are developing the cleanest of coal technology so you can use that, be a nonpolluter and grow.

I think it makes a lot of sense. I am pleased to have thought it through a little bit and to have spoken to it a couple times. The Senator can tell I might have spoken about it one time or another. Yes, I have. It is a pretty good message to be accompanying an energy and water bill if, in fact, this bill is supposed to be doing something about the energy crisis.

We have discussed the approach that there might be something in America that says it is good enough for an America of the future and an America that can help lead the world in the future. I yield the floor.

Mr. CONRAD. Mr. President, I am pleased to rise today in support of S. 1171, the Energy and Water Development Appropriations Act for fiscal year 2002.

The Senate bill provides \$24.96 billion in discretionary budget authority, which will result in new outlays in 2002 of \$16.2 billion. When outlays from prior-year budget authority are taken into account, discretionary outlays for the Senate bill total \$24.7 billion in 2002. Of that total, \$15.2 billion in budget authority and \$14.9 billion in outlays is for defense spending. The Senate bill is within its Section 302(b) allocations for budget authority and outlays for both general purpose and defense spending. Further, the committee has met its target without the use of any emergency designations.

I again commend Chairman BYRD and Senator STEVENS for their bipartisan effort in moving this and other appropriations bills quickly to make up for the late start in this year's appropriations process. I also commend subcommittee Chairman REID and Senator DOMENICI for not only bringing this important measure to the floor within its allocation, but also for providing significant additional resources above the President's request for both the Department of Energy's Atomic Energy Defense Programs, which will help dramatically reduce the threat of proliferation of nuclear warheads, materials, and expertise in the former Soviet Union, and for renewable energy resources, which will help ensure an energy portfolio that balances the Nation's long-term needs for both energy and the environment. I hope all Senators will join me in thanking our able colleagues from Nevada and New Mexico for their vision and good work.

I urge the adoption of the bill.

I ask unanimous consent that a table displaying the Budget Committee scoring of this bill be inserted in the RECORD at this point.

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

S. 1171, ENERGY AND WATER DEVELOPMENT, 2002; SPENDING COMPARISONS—SENATE REPORTED BILL

[In millions of dollars]

	General purpose	Defense	Mandatory	Total
Senate-reported bill:				
Budget Authority	9,713	15,247	0	24,960
Outlays	9,782	14,908	0	24,690
Senate 302(b) allocation:¹				
Budget Authority	9,713	15,247	0	24,960
Outlays	24,916	0	0	24,916
House-passed:				
Budget Authority	9,670	14,034	0	23,740
Outlays	9,806	14,122	0	23,928
President's request:				
Budget Authority	9,003	13,514	0	22,517
Outlays	9,336	13,758	0	23,094
SENATE-REPORTED BILL COMPARED TO:				
Senate 302(b) allocation:¹				
Budget Authority	0	0	0	0
Outlays	(226)	0	0	(226)
House-passed:				
Budget Authority	43	1,213	0	1,256
Outlays	(24)	786	0	762
President's request:				
Budget Authority	710	1,733	0	2,443
Outlays	446	1,150	0	1,596

¹The 2002 budget resolution includes a "firewall" in the Senate between defense and nondefense spending. Because the firewall is for budget authority only, the appropriations committee did not provide a separate allocation for defense outlays. This table combines defense and nondefense outlays together as "general purpose" for purposes of comparing the Senate-reported outlays with the subcommittee's allocation.

Notes.—Details may not add to totals due to rounding. For enforcement purposes, the Budget Committee compares the Senate-reported bill to the Senate 302(b) allocation.

LAKE BOND

Mr. HUTCHINSON. I would like to thank the Senator for his support of continued funding for a small flood control project for Bono, Arkansas, which is very important to me. I appreciate his efforts to help me secure language in the statement of managers which would fund this project under the section 205 small flood control projects program.

Mr. DOMENICI. I say to my good friend from Arkansas that I understand the situation in Arkansas and the reason for his amendment. I am happy to support report language which will take care of this project in place of the Senate voting on your amendment.

Mr. HUTCHINSON. I thank the ranking member and I also thank the honorable chairman, Senator REID, for his help with this vital flood control project.

I withdraw my amendment.

The PRESIDING OFFICER. The Senator from Nevada.

APPOINTMENT OF CONFEREES—
H.R. 333

Mr. REID. I ask unanimous consent, with respect to H.R. 333, the Senate insist on its amendment, request a conference with the House, and the Chair be authorized to appoint conferees on the part of the Senate, with no intervening action.

There being no objection, the Presiding Officer appointed Mr. LEAHY, Mr. KENNEDY, Mr. BIDEN, Mr. KOHL, Mr. FEINGOLD, Mr. SCHUMER, Mr. DURBIN, Mr. HATCH, Mr. GRASSLEY, Mr. KYL, Mr. DEWINE, Mr. SESSIONS, and Mr. MCCONNELL conferees on the part of the Senate.

Mr. REID. 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. DASCHLE. Mr. President, I ask unanimous consent the order for the quorum call be dispensed with.

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

COMMENDING ELIZABETH
LETCHWORTH

Mr. DASCHLE. Mr. President, earlier today both the Democratic and Republican Conferences unanimously passed resolutions which I believe ought to be made part of the RECORD at this point during the business of the Senate.

I ask unanimous consent that both resolutions by read at this time.

The PRESIDING OFFICER. Without objection, the clerk will read the Democratic resolution.

The assistant legislative clerk read as follows:

RESOLUTION COMMENDING ELIZABETH
LETCHWORTH

Whereas Elizabeth Letchworth has served the Senate for over 25 years serving as both Secretary for the Majority and Secretary for the Minority;

Whereas she has worked for, and with, 6 different Majority Leaders;

Whereas, though she has worked for our colleagues on the other side of the aisle, her assistance, over the years, to members of the Democratic conference has often been appreciated.

Whereas her institutional memory, unflappable demeanor, and good humor will be missed by Senators and staff alike on both sides of the aisle: Now therefore be it

Resolved by the Democratic Conference, That Elizabeth Letchworth is to be commended and thanked for her many years of service to the Senate and wishes her, and her husband Ron, all the best in the years to come.

The PRESIDING OFFICER. The clerk will read the Republican resolution.

The assistant legislative clerk read as follows:

RESOLUTION RELATING TO THE RETIREMENT OF
ELIZABETH LETCHWORTH

Whereas Elizabeth B. Letchworth has served this conference ably and honorably for over 25 years;

Whereas in 1995 she was elected as the Secretary for the Majority becoming the first woman to hold this post;

Whereas during her service she has assisted all members of this Republican Conference with diligence and professionalism;

Whereas her knowledge of the Senate rules and Institutional history has been a valuable asset to all Members: Now therefore be it

Resolved, That the Republican Conference extends its sincere thanks to Elizabeth B. Letchworth for her service for over 25 years and wishes her all the best in her future endeavors.

The PRESIDING OFFICER. The Republican leader.

Mr. LOTT. Mr. President, I thank Senator DASCHLE for allowing me to comment on these resolutions. I would like to begin by thanking the Democratic caucus for doing this. This is a