THE PRESIDENT’S PLAN FOR ENERGY

The SPEAKER pro tempore (Mr. OSBORNE). Under the Speaker’s announced policy of January 3, 2001, the gentleman from California (Mr. RADANOVICH) is recognized for 60 minutes as the designee of the majority leader.

Mr. RADANOVICH. Mr. Speaker, I appreciate the privilege to come on this floor and talk about the President’s plan for energy and for the future of the United States of America.

I wanted to make a couple of points in response to the speech of the previous hour regarding the situation in California. I am from California. I represent Fresno, California, and the central part of the state, where we too are at ground zero of the California energy crisis.

There were a couple of statements made earlier which spoke ill of deregulation and used California as an example of that, and I would like to clarify that in California there was never really a deregulation plan. It was half a deregulation plan.

In California’s deregulation plan, the rates and the charges that the utilities were able to charge consumers were frozen. They were frozen rates and were not allowed to be increased, whereas the wholesale rates, or those rates that utilities had to go out and purchase energy for, were unlimited and put on the spot market, so that they would change minute by minute, hour by hour, every 24 hours, which made them very susceptible to high price spikes and such.

That was the problem in California, the problem that the price increases could not be passed on as signals to the consumer to start conserving was what created the energy crisis in California. It was half of a deregulation plan, and under such a situation, it could have been easily corrected, up to a year ago. In May of the year 2000, when evidence started showing in San Diego that prices were going through the roof, the Governor of California, who I believe was more concerned about providing leadership in a crisis than, frankly, his own reelection prospects and obtaining the presidency, had he acted earlier and imposed or allowed the PUC, the State PUC, to impose a 20 to 25 percent rate increase, not like the 48 percent rate increase that was passed because he waited so long. I think, people would have been able to begin conserving and he would have been able to get a lot of these utilities off the spot market and into some long-term contracts that made sense, and we would have never faced a $20 billion hit to the State of California. The minimum damage that could have been done would likely have been around $500 million to $1 billion.

It was due to lack of leadership in California that created the energy crisis, and it was lack of leadership from the Governor and the State of California that created the energy crisis in California.

I cannot explain that more. To be blaming a President who has only been in office for less than 6 months for all the woes of California I think is just unjust and unfair, and it is a diversion of what the real issue is, and that is that we have got poor leadership on this issue in the State of California.

If California really wants to get out of their energy crisis, they only need to do a couple of things. I would say three things.

First, the Governor has to stop buying power. I think the Governor has been taking on this responsibility for about 6 months now, and, since then, he has been purchasing energy up to seven times more than what the utilities are able to charge for and get back.

That is an upside down equation that leads to billions and billions of dollars worth of debt that the utilities, after $9 billion in debt, could not manage. So the State has started incurring those losses, and still do.

Today, California’s Department of Water Resources, under the eye of the governor, is purchasing power right now 3 to 7 times more than what utilities are able to get from it. Now, granted, those prices are starting to come down, because a rate increase of 48 percent was imposed by the governor a year after he could have done it and averted this whole problem, has come into effect, and people are starting to conserve, and the future prices of energy are beginning to come down. That is what should have happened a year ago and did not happen until now.

My own utility bill that I just got from my residence in California right now is about 4 times more than average of it.

I think people in general are experiencing a doubling to tripling of their retail rates because of this. A 20 to 25 percent rate increase early on, with decisive leadership from the governor, would have prevented this entire thing and, instead, in waiting so long and in purchasing energy at such convoluted prices, he has led California into this crisis and we are still in the middle of it.

Mr. Speaker, in addition to that, the governor has entered into long-term contracts that do not start for about another year, but the average of those long-term contract prices range from about, again, 3 to 7 times more than what the utilities are able to charge for. I had a company in my office the other day that talked about the inability of the governor to sit down with all those that are involved in the energy crisis in California; that would be the utilities, that would be the marketers, that would be everybody that cares about California and who has a business stake in California, not only in the short term, but in the long term, and to sit down and work through this process, really resulted in nothing. In fact, down until at least 8 months after the crisis began. Had the governor gotten people into his room, he would have been able to negotiate things.
As an example, one company that has a geothermal plant in southern California, chose to go to the gentleman from California who just spoke. He has geothermal energy from alternate sources like wind and solar, but also realizing that they are never going to be able to take the energy from some source unknown or unnamed, so let us not take care of our own energy needs.

Mr. Speaker, my own congressional district in California grew by 20 percent over the last 10 years. We are one of the faster growing parts of the State, but it is very obvious in all of California that our population was growing, our energy demands were increasing, and nobody was making the efforts not only to increase the capacity of the natural gas lines that come into the State of California from other areas, but also to license and permit other plants and facilities in the State in order to make up for it.

It is much the same I think with Americans. We like to have the lights come on when we flip the switch; we love to have water come out of the faucet when we turn it on, but very few of us want one of those own facilities in our community to provide that for us. As individuals in our local communities, we are like that, but we are also that way nationally, when it comes to the national energy policy that we have.

The United States consumes over 25 percent of the energy produced in the world today, and yet we utilize and use about 2 percent of our natural resources to get it. It is this kind of nimbii attitude I think on a local level that has caused problems in California and, kind of on a national level, in our participation in the world’s energy reserves that we think that we can have our cake and eat it too.

Mr. Speaker, I am grateful that the President has taken the initiative on this energy policy to change that, because not only is it hypocritical, it is not serving in our best interests, it is a threat to our national security, and I think it is morally wrong to demand a lifestyle and yet not pay up for it to think it is morally wrong to demand a threat to our national security, and I think that I do not even want to say the word "leadership," in California that has caused our problems. It has not involved the environmentalists to a degree that has caused the shortage in California, it has really been a short-sightedness I think on the part of Californians to think that we can bury our heads in the sand and pretend that our rapid increases in population are somehow some threat to their energy supply from some source unknown or unnamed, so let us not take care of our own energy needs.

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fact, if we did anything, we ruined a lot of
places because of monuments that
were not thought out and things along
that line.

Vice President Cheney was given the
assignment to work on the energy pro-
gram and did a very commendable job.
I read it very carefully and, in my
opinion, if there is one word that would
explain what the present administration
has come up with, it is the word
“realistic.” They came up with a real-
istic program on how to face some of
these things.

Now, I enjoy hearing my colleagues
talk about all of these wonderful
things that are going to happen and
how it is going to come together, but
when we get right down to it, in all
honesty, what is “going to happen” is
not there. We cannot drive into a gas
station, walk to a phone booth, and use
the technology and advance it as far and
as rapidly as we can. However, it is not
there right now.

I would like to use the illustration of
a gentleman that came into my office
about 5 or 6 years ago and he started
telling me about all of the interesting
things that have occurred in transpor-
tation. He said, years ago, we used to
use horses and then we went to cars
and on, and so many people went on buses
or trains, and it was really a big deal
when the 2 trains came together in
Promontory, Utah, in my district, inci-
dently, and every May we celebrate
the idea of driving the golden spike.
Gosh, we could get on a train and in-
stead of doing 4 miles an hour on a
horse, we could breeze across the coun-
try in 2 days. That was a wonder-
ful thing. People really thought it was
a Utopian idea. Then came along air-
planes and, of course, now we do not
see too many people travel on trains,
most of us go by air.

Well, he made an interesting state-
ment. He said, I am working on a pro-
gram, and, he said, I think it will be
there, where you walk into a thing like
a phone booth and you punch in San
Francisco and zap, you end up in a San
Francisco. Well, to this extent I got just
a tad nervous talking to this gentle-
man. I said, when is it going to be
there? Well, at that point I got just
a phone booth and you punch in San
Francisco, and especially my friend, the
gentleman from California. I agree with the
gentleman from Oregon. It is too bad we
cannot capture it and make it all work
right now. If someone would step up to
the plate and say, here is the tech-
nology we have, and doggone it, I am
going to do it right now, I commend
them, and I hope they come up with
something good.

But right now, the plan that we have
introduced in both of these committees
is around this word “realistic,” and
realistically, where are we getting our
energy? Our energy is basically coming
from fossil fuels. Also, it is coming
from other areas. We do get some out
of water. We do get some out of various
sources of energy. But right now, the
one that they have come up with takes
care of that.

I notice the one gentleman from Cali-
ifornia talked about the idea that it was
not California’s problem, it was the
problem of these big energy guys who
would not build these things. Well, no
dissrespect to our good friend from Cali-
ifornia, and especially my friend, the
gentleman from California (Mr. RADAN-
OVICH), but let us look at what Cali-
nia has put in the way of restric-
tions compared to other areas.

California has made it so difficult to
build a nuclear plant, a coal-fired plant,
especially a coal-fired plant, a
gas-fired plant, that it makes it totally
impossible to do it.

A lot of these people come and say
there are too many regulations, too
many hoops to go through, and there-
fore, we do not want to do it.

Mr. RADANOVICH. If I may weigh in
a little, too, California used to have
three nuclear facilities. We only have
one, now. A few years ago, the Rancho
Seco Nuclear Power Plant, which was
in the Sacramento area, the voters in the
area voted to shut the thing down,
so they not only discouraged new ones,
but there are too many regulations, too
impossible to do it.

Mr. HANSEN. That is sad, in a way.
I think really, I would say to my
friend, the gentleman from California,
that the thing we have to realize is
that we are now 57 percent dependent
on foreign sources. 57 percent, accord-
ing to testimony today in the com-
mittee from the Department of the In-
terior.

It was not too long ago. In fact I
think right at the start of President
Clinton’s administration, where we
were about in the thirties. So we have
really gone in a hurry to get ourselves
up to this amount.

What does America want to do?
Where are we getting that 57 percent?
Some of it is from our friends from
Venezuela, some of those areas. But let
us just have the American public look
at this. That is, do we want to depend
on those we can least depend upon?
Do we want to depend upon Iraq, with a
man like Saddam Hussein having his
hand on the spigot of the oil we get?
Do we want to depend on Iran? Do we
want to depend on Libya? Do we want to
depend on countries that we can hardly
depend on who are sworn enemies to
us, who many of them practice ter-
rorism on us? Do we want to depend
on those people?

People say, OPEC surely does not
have the range of this thing. Who are
we kidding? They can make this go up
and down in the matter of a blink of an
eye, and have shown that they can do
that.
What was so bad about the idea of looking at other sources? Now, a real great actor who considers himself a great environmentalist, who has probably done more than foul it up than anybody I know, wrote a letter to the administration criticizing them for going to ANWR, and made the statement in his letter, well, we are only getting 6 months' worth out of that.

Come on, let us think about that a while. Where do we get this? Does it all come out of one big spigot? Of course not. We get some from Texas, some from Indiana, some from Utah, some from Venezuela, some from California, some from Saudi Arabia, some out of Alaska, we get some offshore, so it is an aggregate.

If we just took one of those, we could say that about any source there is, that, and look at what this day and tomorrow they can go at this thing at ANWR up on the North Slope of Alaska. What do we have up there? It is east of Prudhoe Bay. The last time I was there and heard these people talk about it, they used a lot of figures. One that jumps out at me was 1 million barrels a day for 100 years. That would be about 11 percent of what we are getting.

Then I debated one of our Senators. He said, there is no infrastructure. Where has he been? It is only 74 miles over to the Ayleska pipeline. That is a lot better than we have in the West in a lot of different instances where they could pipe it to the Ayleska pipeline, down to Valdez, and we could use that source.

Today in testimony it went on ad nauseum, and Secretary Norton did a very fine job in explaining the position of the administration about fouling up ANWR.

The gentleman from Alaska (Mr. Young) was there, and very admirably talked about what ANWR is. Frankly, as we look at it, that is 19,600,000 acres. That is the size of South Carolina. If we look at that, we will say, how much are we going to use? The figure now is about 2,000 acres, but it could even be 10,000, but they said 2,000 today. Figure the percentages in that. That is an infinitesimal drop in the bucket.

Also, they talked about the technology, where they can use that small area, and tomorrow they can go to the oil areas, and we would never even know it was there.

The gentleman from Massachusetts said, yes, that is all right, who would be against that? But how do we get it out of there? Do we fly it out, balloon it out? He made light of the idea. He said no, what we do is put in oil lines. That is true, but they are not going all the way.

That is true, but they are not going all the way. What we do is put in oil lines. They said no, what we do is put in oil lines. They said yes, that is all right, who would even know it was there.

There is another thing that was talked about. There is the problem of price gouging. There were a lot of talk about price spikes and all these out-of-State generators that were making incredibly large fortunes.

Mr. Speaker, your committee on Resources regarding the national energy policy.

Mr. Speaker, there are a couple of things that the previous speakers were speaking about that stick in my craw. I just have to address them.

One was regarding the issue of price gouging. There was a lot of talk about price spikes and all these out-of-State generators that were making incredibly large fortunes.

Mr. Speaker, it did a study. They came back, or at least the judge that is trying to resolve the dispute between all those that were involved in the California energy crisis, he came back with the numbers. The out-of-State generators, out-of-State of California, made up or earned about 10 percent of those monies that are alleged to be overcharged during these last 6 months. The other 90 percent went to in-State-qualified facilities and also public utilities, like SMUD, the Sacramento Metropolitan Utility District, and in L.A., the similar utility district in California.

Ninety percent of that number is alleged to be price-gouged went to utilities within the State of California. So we had just better get our numbers right, and better yet, they had better stop doing the blame game and get to solving the problem in California.

There is another thing that was talked about. That is the price caps, the issue of price caps in California, keeping the price down. The PBR did react by providing what they call a 7–24 monitoring system, where 7 days a week, 24 hours a day they will monitor prices, rather than just doing it during
the time of a stage 3 alert. They will authorize the resubmittal of funds that were overlooked.

The ISO, the independent system operator in California, is the one who has the ability to use those caps. They chose not to use them a couple of days ago because energy was at $84 a megawatt, and if they had put the cap that was provided for them by FERC on, it would have driven the price down to half of that, which would have been about $42 per megawatt.

The hydro facility that they were depending on getting energy from, which was up in the Northwest somewhere, and forgive me, I don’t know which State, was going to refuse to sell California the power because they were going to hold the water behind the dam, in effect hold the energy back until the price was higher. So the utilities, we could get it for a higher price, or they could keep it in their reservoirs for their own use later on.

This is what we feared about price caps in the first place. That was that we are in the unfortunate position of having to worry about the price of energy, but also the number of blackouts that are caused by having no energy. Those of us who did not support caps were fearful that blackouts would increase by half again as much in California, and I think we are vindicated by the fact that even the independent system operator will not use the ability to lower their prices in California when they have the ability, because the lights will go out. This is what we have been saying all along.

Mr. Speaker, I really think if we want to solve the energy crisis in California, we need to get the Governor out of the energy purchasing business. We need to restore the credibility or the credit of the utilities, get them back in business, and worry about our State’s infrastructure, and get that up and running just as fast as possible.

If the Governor and leader of the State of California would focus on that, rather than trying to focus blame on anybody but them, I think we would be moving to a solution faster.

Mr. Speaker, I yield to the gentleman from Michigan (Mr. EHLERS), a good friend and to back up science and technology as related to the production of energy in the United States. I welcome the gentleman and thank him for coming down this evening.

Mr. EHlers. Thank you for your good comments. I am very pleased to join him and the gentleman from Utah (Mr. HANSEN) in a discussion of the Republican energy plan, which is progressing nicely through the House of Representatives. And we will be able to enact it fairly soon.

I will be taking a totally different tack in discussing this. This is because of my background as a professor, a nuclear physicist, and also because I have done a fair amount of research on energy over the years. So I am going to deal with the long-term view, but also talk about some basic facts of energy.

Part of the reason is that I listened to the previous hour of debate here in which the other party seemed to be implying that the Republicans do not know anything about energy or energy policy. Well, we have just heard from two speakers on the Republican side who know a great deal about energy policy, first about the situation in California, and secondly, about extraction of resources.

I am going to talk about it from the standpoint of basic science and what we can learn from that and what we can and cannot do and how that impacts us in the future. I am also going to take a rather long-term view on some of these because we have to think long term on this.

I do have to say that dealing with energy and public policy has been very frustrating to me because when I was first elected to the Michigan legislature and worked in both the House and the Senate, I tried to work on developing a solid energy policy for the State of Michigan. I could not get anyone interested in the public or the legislature because we did not have a crisis at that point. Eventually I decided I could better spend my time elsewhere.

When I came to the Congress, I tried to do the same, and again no interest. Once the crisis hits, and by a crisis I mean the price of gas at the pump going up and the price of utility bills going up, suddenly everyone is interested then. I am a little concerned now that the price of gas at the pump is going down, but it may lose interest again. But regardless of what they say or do, we must have a good energy policy, and I hope that will emerge from my comments.

In the study of energy, one of the first things we encounter is the three laws of thermodynamics. Now, thermodynamics, that very word, means heat going into motion. And that was extremely important about 150 years ago when the laws of thermodynamics were developed because that helped us build steam engines, and not only just build steam engines but helped to build efficient steam engines that led to the industrial revolution in terms of steam engines to do work in the factories and also steam engines to move trains across continents.

The laws of thermodynamics, and I do not want to get into a lot of detail, the first one we can ignore; it is very elementary, just dealing with temperature. The second law of conservation of energy, which simply says that in a closed system, energy can be neither created nor destroyed but can change form, from one form to another.

Well, what are the forms of energy? There are many, but I will just mention a few. First of all, let me explain that energy is the ability to do work. And so when we apply a force through a distance, we do work. I happen to have here a rather giant rubber band, and when I pull on it, I have to exert a force. I exert a force through a distance. I am doing work on it. I am imparting energy to this. It is stored as potential energy in this rubber band; or at the molecular level it is stored in the molecular stretching of the bonds within the molecules and between the molecules. When I stop exerting the force, it pulls my hands back in. That energy was stored there and it was used to pull my hands back together. But we lost some in the process.

As I said, in a closed system we do not lose energy, but we have lost some to heat, that is because this is not a closed system, and that helps to warm the room. In fact, we could easily make a heat machine out of this if we wanted to use it for a heating system. Very inefficient, but we could have one that would just simply stretch rubber bands and the heat generated would be built in being able to heat a substantial space.

The third law of thermodynamics is even more important than the second, even though the second is extremely important. The third one is the statement that entropy and any reaction, any transfer of energy, always increases. Now, I am not going to get into entropy here. It is a very complex concept. But it basically means every time we transfer from one form of energy to another, the quality of the energy degrades. That means it is less useful. It cannot do as much work.

Remember, energy represents the ability to do work, and that is why it is so important to us. We went, as human beings, from the nomadic existence to an agricultural existence, or the agricultural age, and first learned how to use nonhuman energy to do work. In other words, animal energy. Before that, humans had to do everything. They tried agriculture and it just did not work that well. There were various agricultural communities, but they all had trouble and many of them failed. Once we had animal energy to use, they learned how to harness domestic animals to do the work, the plowing, et cetera, and agriculture flourished and continued to grow and increase for years.

The next big change was when we learned how to use nonanimal energy, that is the industrial age, where we built steam engines and other machines that allowed us to do more work. And the better the quality of the energy, the more work we can do with it. But as I said, the third law of thermodynamics says every time we use energy, it degrades to a lower level. It is not able to do as much work.
In a modern power plant, we burn natural gas or burn coal, and that produces heat, which we either use to generate steam or operate a turbine. Out of that we get waste heat. We use cooling towers to get rid of it, but we could heat a lot of homes or greenhouses with that if we chose to. But we cannot get much more work out of it. Eventually, whatever we have done radiates out into space.

Now, those are very important concepts because what we have to remember about energy is it is our most basic natural resource simply because we cannot use any of our other natural resources without using energy. If we decide we want to dig a mine in Utah, for example, and extract some materials, and there is a huge copper mine in Utah, as I recall, that takes a lot of energy and the energy is extruded there. So in the mill where it is extracted and smelted, rolled, then transferred to a fabric factory, fabricated, and finally transferred to the consumer. Every single step of the way takes energy, and that is why energy is our most basic natural resource. But it is also our only nonrecyclable resource. The copper that is pulled out of that mine, we can use it, and when we are finished with it in a product, we can recycle it and put it in a different product. But energy cannot be recycled. Once we use it, it is gone.

Now, all of these principles make it very important for us to develop an energy policy that recognizes this, and I believe that the energy policy that Mr. Bush has presented recognizes these issues and begins us on the road for a very long-term plan. There are many different ways of obtaining energy. We have talked tonight about retrieving energy from fossil fuels, primarily oil and natural gas. Another fossil fuel is coal, and that is very useful to us. These involve burning these fossil fuels, because they are combustible, and extracting the heat energy from them and converting that into electrical energy or into energy of motion or things of that sort.

We also know of other ways of using energy. We have Einstein’s famous equation, E equals MC squared, which means that mass can be converted into energy and vice versa. But if we can learn how to convert mass into energy, we get huge amounts of energy out of small amounts of mass. And that is what we have with nuclear power and nuclear weapons. It is just amazing when we consider that the bomb that exploded in Hiroshima had just basically a handful of enriched uranium, of which only a part was converted into energy but was sufficient to destroy a major city; or that a nuclear reactor, rather than simply generating huge amounts of power for a long time out of small amounts of fuel.

We also have another means of nuclear energy, and that is fusion, where we combine hydrogen nuclei or Lithium nuclei and extract energy that way, because we lose some mass in the process. I hope someday, it will be a very good source of energy, but it is a number of years away. But, again, we have to do the planning, because we cannot recycle energy, and someday we will simply want to run out of the traditional sources.

Now, there are other things we can do. People talk about conserving energy. I do not really like to use that term, even though I support it. But I think it is much better to talk about efficiency of use of energy. Because conservation, I find, gives the image of people freezing in the dark. If we are heating our homes and we want to conserve, we turn the thermostat down, turn the lights out, and freeze in the dark.

In fact, I remember once I was at an event during the first energy crisis we know about, in 1973, and one of the speakers got up and he was very proud because they turned the heat down to 55 degrees. This is in Michigan, where I live. And they turned most of the lights out, and he told his teenage daughters that they were not allowed to use hair dryers. They just had to let their hair dry naturally, and so forth. And he went on and on about conservation.

I asked him afterwards what kind of house he lived in. He said, well, we have a cement block house. I said do you realize that for a small amount of money you could insulate that concrete block house and still live comfortably with the same fuel bills? He did not realize that. He did not realize, for example, that concrete is not a good insulator. In fact, one-inch of Styrofoam has the same insulating power as four feet of concrete. In other words, by putting just one-inch of Styrofoam around his house, he would have saved as much as having a four foot concrete wall. And if they added a little more insulation, they would have been very comfortable.

That is what I mean about using energy efficiently. It is not a matter of using less, it is a matter of using it efficiently. And everyone, I believe, supports efficient use of resources. That is how businesses make more money, by being more efficient in their use of their material resources, human resources and machinery. So I think it is very important that we try to be as efficient as possible in our use of energy.

We also have to look at alternative ways of using energy. As an example, hydrogen. I think one of the better developments in automobiles that is coming along the path is the use of fuel cells. And when we will be able to use hydrogen, combine it with the oxygen in the atmosphere, and with almost no pollution produce electricity to drive an electric motor. Now, this is not easy technology, but we know it works because we used it on space vehicles, we have used it on the shuttle and other things for their energy purposes, and we have trial automobiles which use fuel cells. Right now they are still expensive because they are experimental. But someday, when we get the design down and manufacture them in bulk, I am hoping we will be able to sell them as a good source of energy. We can either use gasoline in them or some other fossil fuel and preform it, as they say, so that we extract the hydrogen from it and run the hydrogen through the fuel cell and get our power that way.

Even better would be if we developed a hydrogen economy, where we develop hydrogen out of our fossil fuel resources, or by electrolyzing water, H2O, remember, and separating it into hydrogen and oxygen, and that way we could, using electrical energy from nuclear plants or other plants, generate hydrogen and pipe it around, sell it at hydrogen stations instead of gasoline stations, and power our automobiles that way.

The Hybrid, incidentally, is an interesting way of improving mileage, and again using the energy more efficiently. A couple of manufacturers are doing that now. I expect a few more will be developed. But I regard that as an interim. It is slightly more efficient but not as good as the fuel cell is going to be.

We have to look at other possibilities for alternative sources of energy. Solar energy is tremendously promising in terms of its potential. We get as much energy on this earth from the sun per day as we expend from all our other energy sources for quite a number of years. Huge amounts of energy from the sun hitting the earth. The problem has always been how to get it in a very convenient form, of high quality, very hard to use. But we are making progress in photovoltaic cells, and I expect in not too many years we will find new homes built with solar shingles on the roof, shingles that will generate electricity and help heat the hot water in the House, provide electricity for cooking, for the clothes dryer, and things of this sort, and with some electronics can actually provide high enough quality electricity to run TVs, VCRs, and so forth.

So that is I think a promising alternative that is coming down the pike. I would estimate probably 10 years from now that will be economical. It is not going to be economically feasible to take our existing shingles off and put these others on. That would be costly. But as part of a new building or as part of a required replacement of shingles, it will become economically feasible.
storage device or supplementary energy. The same of course is true for solar, but it again depends where one lives. And we must keep in mind that there is some truth to the ideal promise, particularly for less developed countries. That, incidentally, is one of reasons and the main reason I was opposed to the Kyoto protocol.

I think President Bush was exactly right in saying that it is dead because it only put restrictions on the developed nations, not to developing nations. If we do not have some restrictions on them or at least tell them at a certain date they have to meet these requirements just as we do, we will soon find all of them putting in highly polluting coal burning plants that produce a lot of CO₂, greenhouse gases, a lot of pollutants. Then when we say, there is too much production, There needs to be a cutback. They will say, look, we have all these investments now and all of these marvelous plants. We cannot cut back now.

I think if we have an international agreement, if we ever reach one that places restrictions on us, it also has to place restrictions on less developed countries because then they will make investments in alternative sources of energy such as solar, which is certainly the best answer in many places such as Africa and parts of Asia, rather than building these power plants which will create more problems.

So I have talked about a whole range of different issues tonight, and I did not get into the specifics of some of our current problems. But I am simply saying that the plan that the Republicans are developing is a good launching pad for the things that I have been talking about that we have to move towards in the future. It contains the seeds of a long term national energy policy and certainly the seed of the good short term energy policy that we need right now to address the problems of prices at the gas pump and the crisis in California.

One last thought on that. We have to not only consider energy issues as we have talked about now, but we also have to consider the international relations or foreign policy aspects of it. We are 70 percent dependent right now on oil from other countries. As I said earlier, the energy is our most basic natural resource.

We are at the mercy of other countries because if they cut off our supply for whatever reason, political or war or whatever, we are at their mercy because our industry cannot operate without energy and we cannot produce enough internally instantaneously. That is why it is very important, as the energy plan of President Bush points out, that we must establish our independence from fossil fuels in less developed countries. We have to develop our own sources. We have to develop alternative sources so we can truly be energy independent and not depend on the good will of individuals who may not feel very kindly toward us at various times. Mr. RADANOvICH, Mr. Speaker, in closing, I want to say that the lessons that are being learned in California do not have to be learned in the United States to get a decent energy policy. Even though California is second only to Rhode Island in energy conservation, we have had 63 stage one power emergencies, 63 stage two power emergencies and 38 stage three power emergencies.

The way it happens is when electricity begins to run out, that is a stage one alert. When it gets worse, that is a stage three alert. When that gets worse, that is a stage three alert and from there we enter into rolling blackouts. We are having to suffer through that because they have not been keen on making sure that California has had adequate energy supply and we will create that. We will become a great State or continue to be the great State that we are. But I do not want the country to go through the same problems that California is because of an unrealistic expectation out of energy and where the supply needs to go.

California is getting real real fast. I think the rest of country needs to learn to get real about where our energy supplies need to come from. That is why I applaud the leadership in the House and also the President of the United States for putting this energy plan together, a realistic one that also includes alternative fuels, energies and conservation and puts them in their proper perspective.

ROLE OF THE FEDERAL GOVERNMENT IN AGRICULTURE AND EDUCATION

The SPEAKER pro tempore (Mr. KEINs). Under the Speaker's announced policy of January 3, 2001, the gentleman from New York (Mr. OWENS) is recognized for 60 minutes.

Mr. OWENS. Mr. Speaker, today we concluded the appropriations debate and passed an agricultural appropriations bill for $74.6 billion. I think that it passed with a minimum amount of discussion and controversy.

I think we had an overwhelming vote from all the members. I voted for it myself, even though in the past I have been wary of agricultural bills that have large amounts of subsidies for farmers for crops that no longer need subsidies. But that is not a point that I want to expand on. I want to say that we have passed a bill for $74.6 billion, the Federal Government's involvement in agriculture, and the farmers of the United States care less than 2 percent of the population.

We take good care of our farmers and they give us good return. We are the best fed Nation in the world, but we certainly take very good care of them. Any people among those farmers and that particular group that continues to lobby against all government or complaining about big government, telling government to get off their back, et cetera, it is hypocritical because the government is very much involved in producing the best agricultural system in the world. It is a monument to the achievement of government and education. The Morrill Act which created the land grant colleges in all of the States set off a process which created agricultural engineering and science, an approach to implementing new theories rapidly, the county agents, and a number of different innovations that still survive to this day. There are still committees in every county that relate to the Department of Agriculture.

The system has been very productive. The system is, however, a system that we oversee as the Federal Government, and it is fed and kept alive by the Federal Government. Most people do not know it, but the department of government in Washington which has the second largest number of employees, second only to the Pentagon, is the Department of Agriculture, although we now have less than 2 percent of the population which are actually farmers, bodies who can be called farmers.

Mr. Speaker, we take good care of agriculture and as a result, we get good return. There are 53 million children in the public schools of the Nation. That is far more than 2 percent of the population. If we want to put the same kind of investment into education, we would reap greater and greater returns, I assure my colleagues, on education. As I said before, the productivity of our agriculture system is directly related to the fact that we understand agricultural education very early in the life of the Nation. Land grant colleges were not established to teach theology or philosophy. They were established to bring a new approach to teaching engineering, agriculture and biology in all kinds of things that were very practical and productive. So the great system for feeding America which feeds a large part of the world is based on a step taken by the Federal Government in the area of education. One of our monumental achievements in the area of education was the Morrill Act which established the land grant colleges in all of the States of the United States.

The Morrill Act, of course, was inspired by Thomas Jefferson's genius when he created the University of Virginia, a State-based university. He looked at first step and Morrill followed through, and every single State benefited from the same vision, an extension of the vision of Thomas Jefferson.

We need the same kind of vision as we look at the 53 million children that